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SHOPFLOOR TRADE UNIONISM AT HERBERT'S: A CASE STUDY IN THE
DEVELOPMENT AND DEMISE OF WORKPLACE ORGANISATION.

KENNETH GRAINGER

Doctor of Philosophy
The University of Warwick
Sociology Department

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Shopfloor Trade Unionism At Herbert's: A Case Study In The
Development And Demise Of Workplace Organisation.

Summary

Through a case study, this thesis explores the limitations of workplace unionism among shopfloor engineering workers. This subject is examined through an historical case study of one machine tool factory, Herbert's Edgwick plant, and an account of the research process itself.

The historical approach shows how far the limitations of workplace unionism at Edgwick resulted from the resilience of a distinctive accommodation between skilled workers and managers. It also reports several findings that parallel those made in other labour studies. However, greater emphasis is placed on (1) the stewards' active reproduction of sectionalism - detailing, particularly, the impact on women and Asian workers - and (2) the corporatist politics that arose out of their pragmatism. This study also challenges some contemporary theories about both the politics of new technology and the internal centralisation of workplace organisations.

The narrative of the research process links together the subject of the case study with the experience of the Coventry Machine Tool Committee's campaign for import controls. It does this both chronologically, by showing how my research came to focus on Edgwick, and thematically by highlighting the common limitations in workplace unionism which led to the CMTC's demise and the dispirited opposition to massive redundancies at Herbert's.

The first two chapters develop the setting and identify key issues by providing a biography of the research process. Chapters 3 to 9 provide the main narrative and analysis by tracing the historical development of industrial relations at Herbert's and detailing key events leading up to Edgwick's closure in 1983. Chapter 10 links the case study with the combine and considers the 'pragmatic' character of the stewards' politics. Chapter 11 draws the thesis to a close by reviewing the main findings of the case study and considering their wider relevance to the study of workplace politics.

Keywords:

shop stewards
redundancies
workplace politics
new technology
Alfred Herbert Ltd
women workers
black/Asian workers
young workers
craft workers

CHAPTER ONE: BIOGRAPHY OF A RESEARCH PROJECT

*"Firm which beat the Luftwaffe is finally thrown to the wolves"*²

Introduction

For five days in October 1983, the entire plant and equipment of Alfred Herbert's 14-acre Edgwick site, the last remnant of the Herbert 'empire', went under the auctioneer's hammer. It was the biggest industrial auction since Talbot's Linwood plant was dismantled in 1981³ and with it went much of the hopes for a broad-based campaign amongst machine tool workers against their employers' strategy of disinvestment and rationalisation. However, it did not end the sense of frustration and perplexity felt by a small group of academics and community workers who, through Coventry Workshop, had tried to encourage shop stewards at three local machine tool factories, including Edgwick, to develop just such a campaign.

From its launch in 1977, the Coventry Machine Tool Committee (CMTC) - a combine which drew together workplace representatives of shopfloor and office workers at Wickman's (Banner Lane), Webster & Bennett (Northey Road), and Herbert's (Edgwick) - had campaigned for selective import controls; but the Workshop had hoped that, through a process of dialogue, this would change if

the stewards could be persuaded that the market crisis was largely the outcome of their own employers' strategies.

First, the Workshop brought together a number of academics and volunteers - myself among the latter - to form a machine tool project team. Then, with the support of a local MP, it secured a commission from the combine to undertake an investigation into the causes of recent job-losses in the industry and then compile a report that could be presented to the Secretary of State at the Department of Industry, Eric Varley. Six months later, the project team presented its main findings to the stewards at a series of 'teach-ins'. Everything appeared to go extremely well. At the conclusion of one 'teach-in', Ron Doughty, the CNTC's secretary and works convenor at Edgwick, observed that we had "reversed cause and effect": we had shown that the rise in imports was a product of the redundancies, instead of the other way around. Shortly afterwards, a local firm held an exhibition of Polish machine tools and, almost apologetically, the stewards decided to organise a picket. That was in the summer of 1978. For the next two years the demand for import controls remained their central objective. Then came redundancies which decimated the workplace organisation at Edgwick. And, in the early months of 1981, the surviving members of the combine, now part of a "national steering group", made a rhetorical (and strangely unconvincing) pledge to fight for "the social ownership of the industry under workers' control" shortly before their jobs were made 'redundant'.

When I began my academic research in the autumn of 1978, I hoped it would enable me to develop the work I had undertaken as a volunteer. Still full of enthusiasm about the potential of the combine, I set out to support the Workshop's continuing discussions with the stewards by examining the present and potential impact of new technology on factory politics in the machine tool industry. After a long and unrewarding struggle with the problems of trying to sort out 'academic' from 'activist' research - made all the more difficult because of the inactivity of the stewards' campaign - I retreated into a case study.

I selected Edgwick as the subject of that case study largely because the works convenor there, of the three AUEW convenors who dominated the combine, was the most sympathetic towards the Workshop. It also happened that through his patronage I was given access to all stewards' meetings and union records, and tolerated for the many hours I spent on the shopfloor talking to stewards and members. These encounters 'diverted' my research as I witnessed the senior stewards' curious passivity in the face of the company's approach towards its second bankruptcy in five years. As with the CNTC's politics, I was baffled by their rejection of any kind of class-based campaign both inside and outside Herbert's, despite the fact that the National Enterprise Board's well-known intention to cease funding the company in 1980 threatened the very existence of Herbert's few remaining plants. Again, as in the CNTC's 'campaign', the senior stewards seemed to

ignore past rebuffs and persisted with corporatist appeals to MPs and employers to save the company. At the very last moment, and prompted by the staff unions, a 'sit-in' was organised; but it was a sullen affair and collapsed after Edgwick, Herbert's sole surviving plant, was 'rescued' on the basis of a massive redundancy programme. From that point the workplace organisation was reduced to the role of impotent spectator as the company continued its decline until its liquidation in 1983.

To make sense of these experiences, I decided to take advantage of the access I had gained to union archives at Herbert's by looking back into the history of trade unionism at Edgwick from the re-armament boom, in the 1930s, to the early 1970s, when the stewards had to respond to the company's first major financial crisis. The account that seemed to emerge from those documents was tested out against the reminiscences of former managers and stewards, and some of the established accounts of workplace politics in twentieth century engineering plants. (This latter task involved challenging a variety of specific arguments on such matters as the gang system, employer-paternalism and the wartime phenomenon of 'Coventry Communism'.) The findings of that historical case study of workplace trade unionism which finally emerged from this process provide the subject of this thesis.

Signposts

Before commencing the narrative of unionism at Herbert's, chapter 2 continues the narrative of the research process by discussing the main findings of my fieldwork in 1979. This fulfills a number of objectives. First, by providing a glimpse of Edgwick in its twilight days, the chapter offers a signpost to the historical narrative. Second, through its discussion of Marxist accounts of technical change, it establishes the double importance of an historical approach. Such an approach not only provides a means of understanding the contradictory forms of factory politics that have been encountered in a number of cross-sectional studies of new technology (and the contradictions in managerial policies at Herbert's); but also offers a way of coming to terms with the apparent inadequacies of the stewards' response to management's drive to rationalise the labour process through new technology's impact on product design.

Chapter 3 begins that historical narrative at the firm's beginning: the first years of Alfred Herbert, the company's founder, as an entrepreneur. This starting point was chosen for two reasons. During the fieldwork I was impressed by the importance given to the firm's history, both by the managers and stewards, and the way current events were judged and interpreted through a knowledge of that history. The second point relates to the argument about management determining the political terrain for the stewards' activities. In an examination of Herbert's

early years as an entrepreneur, I will want to show the prime importance of family ties in starting and sustaining the rapid growth of his company from the 1890s to the First World War. Chapter 3 also looks at the firm's period of consolidation during the inter-war years and, observes, contrary to its "progressive" image, the first, ominous signs of managerial conservatism in this machine tool "giant".

Covering the same, inter-war years, chapter 4 examines workplace politics at Edgwick before the emergence of a shop stewards' organisation outside the craft enclave of the patternshop. The link between the role of the family in sustaining Herbert-the-entrepreneur and Edgwick's factory politics is established by focusing on three major features of work at the plant: the presence of young people as employees and, more particularly, as part of Herbert's "vast apprenticeship system"; the firm's variant of the gang system, a form of collective piecework; and, lastly, employer-paternalism.

Having sketched out the more prominent features of this management-created terrain, I am able to begin the stewards' story. Chapter 5 charts the development of the stewards' organisation from the early phase of the re-armament period through to the immediate post-war years. In that account, it details how, during the first years of the Second World War, a leftist leadership which had re-built the organisation was

limitations imposed by Herbert's variant of employer-paternalism.

Chapter 6 continues the stewards' story by looking at political developments within the workplace organisation during the first two decades of the post-war period. Through an analysis of the sectional experience of work at Herbert's detailed in the first part of this chapter, I will try to show how the weak and tenuous character of the organisation reflected the interests of those sections at the top of the plant's labour hierarchy. The second part of the chapter elaborates the same theme by following events after a 'palace coup' in 1961 in which the old steward leadership was ousted by one that adopts a principled and class-conscious approach to its dealings with management and challenged the limits of workplace politics. The outcome of that struggle echoed the experiences of the previous generation of activists: the resilience of the accommodation between managers and skilled workers was re-affirmed. The chapter closes with an intimation of an attempt by a new senior management to challenge that accommodation 'from above'.

In chapter 7 the focus of the case study is switched, once more, to senior management. First, it shows how, contrary to the firm's public image, the managers were aware of Herbert's relative decline during the 1950s and the ways in which the founder's conservatism both in technique and product design had contributed to this situation. Then it details the efforts to stem that decline, from the early, partial reforms which addressed

essentially non-labour issues to a number of major initiatives including, and significantly, last of all, the attempt to re-cast workplace politics at Edgwick. This narrative concludes with the observation that the reform of labour relations was both prompted by Herbert's corporate crisis and became one of its victims.

Managerial crisis provides the setting for chapter 8 which looks at the politics of the productivity payment scheme introduced in the closing years of the 1960s. This chapter contrasts the radical scope of the scheme with the changes that actually took place in workplace politics at Edgwick. Observations on the senior stewards' enthusiasm for the scheme is linked to the continued frailty of the workplace organisation. The stewards' subsequent failure to organise any serious opposition to redundancies demonstrated both the correctness of their concern and the resilience of the old accommodation that had characterised workplace politics before the reforms. This discussion concludes the detailed examination of Edgwick's history.

In a brief, selective narrative of a decade of crises, Chapter 9 links that first, major redundancy programme with the plant's closure in 1983, the moment when, as the *Daily Mirror* put it, "the firm which survived the Luftwaffe is finally thrown to the wolves".² Through that narrative I shall point out the continued limitations of workplace organisations at Herbert's. I shall also demonstrate how those same limitations created a difficult terrain for the stewards and encouraged the leadership to keep

within established political horizons, even though this effectively ruled out the possibility of organising any serious opposition to the steady attrition of jobs and the plant's eventual closure.

Chapter 10 develops this argument by moving beyond the strict confines of the case study to consider the 'pragmatic' character of corporatist politics of the CMTC combine - a combine largely started, and organised by, Edgwick's works convenor - and explore the reasons behind the Workshop's failure to persuade the convenors to adopt a socialist response to the jobs crisis.

Finally, chapter 11 concludes the Edgwick case study by reviewing the main findings and considering their wider relevance to the study of workplace politics.

Chapter One: Endnotes and References

1. Sub-heading of "Death of a Factory", *Daily Mirror*, 14 October 1983, p. 9.
2. "Alfred Herbert R.I.P. (Rationalised, Ignored, Pillaged)", *Coventry Workshop Bulletin* 40 (October-November 1983), pp. 3-6.
3. *Daily Mirror*, op. cit.

CHAPTER TWO: NEW TECHNOLOGY AT HERBERT'S

Introduction

In the previous chapter a brief reference was made to the Workshop's investigation into the causes of the massive job-losses in the machine tool industry during the 1970s. As I mentioned earlier, the finding was that the employers' strategies of rationalisation and disinvestment in the UK industry had prompted a sharp rise in imports which later became the focus of the stewards' campaign. Another finding of that enquiry was that firms intending to continue production in the UK would have to 'automate or perish'.² It was this analysis which provided me with the rationale for extending the Workshop's enquiry into the machine tool industry by looking at the impact of new technology on the shopfloor. As I explained in the introductory chapter, I had two reasons for pursuing that research through a detailed case study of one machine tool plant. Firstly, I hoped to gain a clearer understanding of the processes of change. Secondly, and equally important, both the subject and the research approach presented a fresh opportunity for the Workshop to break the political inertia that seemed to grip the Machine Tool Committee and renew our dialogue about class-based strategies to defend jobs. On the first point, Edgwick was a debateable choice. During the 1970s Herbert's was frequently described as the 'ailing machine tool giant' and Edgwick widely regarded as the source of

that 'sickness'.² However, since 'nationalisation' in 1975, the National Enterprise Board had pumped £57m into the company and some of that money had gone into the re-organisation of production and product development at Edgwick.³ The then imminent launch of a new CNC lathe, codenamed AL-76, hinted at (another) possible revival of Herbert's fortune. So there was much to be learned from this example of state-sponsored restructuring of capital. But there could have been no doubt about Edgwick's suitability on the second point. Among the three works convenors who controlled the Machine Tool Committee, Ron Doughty was certainly the Workshop's best ally. He enjoyed political debates, broadly supported the policies of the Labour Party's left-wing, and was very happy to 'return a favour' to the Workshop even though our report had challenged the rationale of his campaign for import controls.

This chapter discusses the main findings of the fieldwork conducted at Edgwick during the latter half of 1979. It tackles the subject in two stages. The first contrasts Braverman's account of numerical control, "as a prime instance" of technical change under capitalism, with my observations on management's application of computer-based control systems on the shopfloor. The second section tries to explain those contrasts by drawing on historical material gathered long after the fieldwork was ended. As I elaborate that explanation I will try to develop the argument that while the systems installed on the shopfloor did not have the effect on the organisation of work that Braverman's

account might suggest, new technology had already had some impact on the level of employment through changes in product design, and was about to provide the rationale for halving the plant's much-reduced workforce. I then conclude this chapter with a few words about why I discontinued my study of new technology and became concerned to try and understand workplace politics at Edgwick.

Braverman and New Technology at Herbert's

Marxist assumptions about managerial strategies and the
subordination of labour

In a classic restatement of Marx's ideas on the relationship between technological change and workplace politics, Braverman claimed that the distinctive feature of technology under capitalism is that techniques are developed that not only increase the productivity of labour but also augment managerial control over the productive process. This, he argued, is why technology is used to separate the conception and execution of labour. In his chapter on 'machinery' he cited numerical control (NC) as "a prime instance of the managerial use of machinery in the capitalist mode of production, and how this affects the worker and the labour process".* I shall argue that, as Lazonick observed in Marx's discussion on self-acting mules in Lancashire's cotton mills, Braverman used a Marxist theoretical

framework "as a substitute for, rather than as a guide to, empirical analysis" and "derived his conclusion of the omnipotence of technology in the subjection of labour from an uncritical acceptance of capitalist ideology".

Braverman observed that NC was designed to effect a separation of the conceptualisation and execution of work. There was, he claimed, no practical reason why the process should not be united in the hands of the skilled machinist; but this rarely happened because the technology was intended to break up the machinist's craft skills and "cheapen the resulting pieces of labor".

Braverman elaborated this argument by providing a detailed account of the division of labour under NC technology. First, the job of the skilled machinist is broken down into a planning function to be carried out by a parts programmer who is young and relatively cheap to employ because the task entails only a minimal knowledge of metal-cutting. This was possible, Braverman explained, because the required information had been abstracted and contained in engineering manuals. Then another worker, invariably a "girl", produces a paper tape from the programmer's work which is inserted into the machine's control console. The cutting operation is still monitored by an operative; but this person has only been trained to "perform several rather straightforward prescribed routines...(and) does not possess the technical skills of the experienced machinist". Indeed, in one passage Braverman claimed that all the machinist's skill are

eliminated:

"So far as the machine operator is concerned, it is now possible to remove from his area of competence whatever skills still remain after three quarters of a century of 'rationalisation'. He is now definitely relieved of all the decisions, judgement, and knowledge which Taylor attempted to abstract from him by organisational means. The true 'instruction card' - Lillian Gilbreth's 'self-producer' of a pre-determined product' - is at last fully revealed in the program tape."

Leaving aside the implications of Braverman's explanation for the minimal knowledge of the planner - which suggests there was little 'mystery' left in the machinist's craft if management could adequately represent it in "tabulated and standardised form" - the chapter conveys the powerful impression that this new technology was not problematical for managers and that machinists have offered very little resistance wherever it has been introduced. The only managerial 'problem' Braverman mentioned - and significantly it came in a footnote - was the practice of 'red-circling' in which managers agreed to maintain the pay of individual, skilled machinists for the duration of their occupancy of the job in order to avoid "a bitter battle with the union".⁷ Interestingly enough, Braverman does not explain why skilled machinists were allowed to operate these machines at all, or why any managers should wish to avoid confrontation if the technology gave them, as Braverman's account implies, such

overwhelming superiority on the shopfloor?

Lazonick's paper on technical change in the textile industry during the nineteenth century makes it clear that the impact of the technology on the shopfloor cannot be read off the technology itself. Marxist theory on the dynamics of technical change, and capitalist claims about the power of the technology to re-shape workplace politics, he argued, cannot be used as a substitute for empirical analysis. Instead, it is important to look at the political and economic factors which have shaped production in the past and provide the context for the introduction of the new technology. Lazonick argued that *"the relations of production and the development of the forces of production interacted in a dialectical manner, primarily because there was a continual process of conflict, compromise and even co-operation between capitalists and workers, over the form and content of the components of technical change"*.^{*} It is important to note that when Lazonick talked of the *"relations of production"*, he was concerned with relations between capitalists as well as between workers and capitalists. Indeed, at one point, he claimed that in his case study, *"the nature of the relations between capitalists themselves was of prime importance. Excessive competition and vertical disintegration from cotton suppliers to cloth merchants deprived capitalists in the industry of the possibility of developing, either individually or collectively, a strategy to reshape the technical structure of production and control markets, ie, to 'rationalise' the industry."*^{**} Similarly Elbaum et

al. have argued that "three basic sets of relationships influence the development of the labour process: relationships between capital and labour, among capitalists, and among groups of workers."¹⁰

Fieldwork observations

When I visited Edgwick's main machine shop in 1979, there appeared to be relatively few NC and CNC machine tools on the shopfloor. In fact, there were 28 of these devices but in the cavernous spaces of what was reputed to be Europe's largest machine shop,¹¹ where they stood beside another 260 machines (and the spaces created by the removal of over 300 more machines since 1974),¹² they seemed to have a marginal presence. Most were produced by Herbert's - this included eight CNC and four NC turning machines built at Edgwick itself and eight NC drilling machines from Herbert's Lutterworth plant - and installed after 1972.

Despite this apparent marginality, I found common agreement among managers and stewards that these NC and CNC machines had increased productivity. The stewards felt this had caused job-losses in the turning section as the plant's output had declined; but they also believed that the productivity of the CNC milling machines had only resulted in production bottlenecks. It also seemed that, much as Braverman's account suggests, some

machinists had accepted the 'new division of labour' without resistance. This, I was told, was particularly true of the 'older men', those in their fifties. If this observation was generally correct - later I learned that it most certainly did not apply to those veterans who were described, by both management and stewards, as "intelligent machinists" - it was an understandable reaction. The push-button facade of the machine's control console can look frighteningly new. And there is a world of difference between pushing a button and handling 'knobs and wheels': with one you hope that the machine will do what it is supposed to do; with the other you can physically guide the machine along. This kind of passivity seemed also to typify the attitude of the men who operated the NC drilling machines, where there was little scope for intervening in the actual cutting operation of the machine since most of the skill content of the job had been in the marking out of the work. But in two different ways this passivity was not as total as might be assumed from Braverman's study.

A monitoring role

Machinists still had an important monitoring role both because of the unreliability of the machinery and its software and the variable quality of some metals that are machined. In the early years of NC and CMC the unreliability of the machinery made constant monitoring necessary. Sid Birch, a service engineer in

the late 1960s recalled irreverently:

"Now, we built this thing and it didn't always stop! I'm joking but I'm (also) dead serious! In a customer's works you'd perhaps spend three days curing his fault and your heart's in your mouth. It could miss the feed trip (and) go straight through. Then it's a mess, you know."¹³

My impression was that these major 'teething problems' had been overcome by 1979; but it is possible, as Bhattacharyya found in his survey of NC users in 1976, that the reliability of CNC machines was a continuing problem.¹⁴

The second reason for active monitoring by the machinist relates to the variable quality of the metal components fed into the machine. One senior engineer at Herbert's explained that "NC programming according to the 'book' is like programming a lawn mower and letting it run".¹⁵ Harley Shaiken used the analogy of planning the route for a motor trip to convey the same point:

"The problem arises if there is no way to monitor the road conditions while one drives. If it's raining, one has to slow down considerably; if there is an obstruction in the road that is not on the map, the best computer-selected route is...(no) protection against a serious accident."¹⁶

When the machine shop superintendent talked to me about the NC operative's "responsibilities" he was implicitly acknowledging management's continued dependence on what Shaiken called the

worker's "feedback skills":¹⁷ his knowledge of metal-cutting - which would tell him, for example, that "a slight change in the sound of the machine could mean a poor finish"¹⁸ - and his ability to handle potential mechanical disasters.

Interventions in 'planning'

Apart from this monitoring role, there were other ways in which some machinists did not conform to Braverman's image of labour's passivity. Two programmers I talked to complained of machinists who edited the parts programs and then tried to conceal them from the office. Without any formal instruction, these operators had learnt how to read paper tapes and how to edit them on the machine's computer console. When they combined this new knowledge with their practical experience of metalworking, it is easy to see why the programmers were jealous over their access to the console: "We need to insist on control over all alterations", I was told, "not to protect our jobs, but to make sure that the office has a copy of the latest tape."¹⁹ There may have been some financial advantage to be gained from secretly editing the programmer's work since the machinists, like all the other workers on the shopfloor, were paid on the basis of a day-rate system with a plant bonus. But this incentive would have been small since the technology provided a much-reduced scope for increasing the speed of operations and the bonus was determined by the effort of a much wider group of people than this small

section of machinists. Instead, I would suggest that the main incentive for altering the program is that it provided the operator with the means to carve out a little free time and re-assert some control over the organisation of work.

Machinists could exercise control over their work in a more open fashion, too. Some were prepared to complain about the programmer's work in much the same way as they would have challenged a methods engineer under the traditional technology. As the foremen and machine shop superintendent viewed the eight programmers as young men with little, if any, direct experience of metal cutting, the machinists usually had their way if a dispute developed. Geoff Buckler, a section leader of the programmers for the turning machines, explained how he tried to avoid this sort of confrontation:

"Sometimes we produce tapes and think: 'how would George machine this job'...or 'how would Harry do that?' It's amazing. You'd think one tape for one job would be OK for all the operators for that type of machine; but it's not...The tape has to be tailored to their ideas.""

In addition to siding with machinists in particular disputes with programmers, I found management's general attitude towards these two groups of workers could not be read off Braverman's account of the technology. The senior engineers were happy to explain why skilled labour was still needed. One argued, as mentioned earlier, that certain monitoring skills were required. Another

engineer, Frank Craven, (then hired as a consultant but formerly employed by Herbert's) asserted machinists also had a vital role in planning the job. In a paper published by Herbert's in the early 1970s, he disputed the common claim that NC increased managerial control. Control passed, ostensibly, to the programmer who "even with aids such as computer terminals, has a complex and difficult task to carry out...(and) is frequently subjected to criticism by shopfloor management and others who cannot accept tape errors as reasonable." Such criticisms, he argued, frequently led to "inherent caution" being built into the programs. Craven claimed that Herbert's took this point into consideration when they developed a CNC design that allowed tape editing on the machine's control console:

*"There is little point in having rigid 'management control' if the result is to give cutting conditions which are less than perfect. Surely, it is better to release some of this control so that the operator can be less exasperated and can, himself, take command."*²¹

First-line management not only recognised their continued dependence on the practical skills and knowledge of the shopfloor; they seemed to celebrate it. For example, Bill White, the machine shop superintendent, told me of machinists he called "engineers", men such as Jack Garner - a Herbert veteran like himself - who tested out the company's proto-types in routine production runs. Jack had operated Edgwick's first Batchmatic; and now he had the AL-76. He had said - and Bill believed him -

that he did not begin to learn about the capabilities of those machines until the design engineers had left him alone. Overall, Bill believed he could draw a distinction between the MC programmers who were "educated" and the "intelligent" machinists. The programmers were young men, fresh from their craft or technician apprenticeships: the "engineers", the best of them, had through years of experience got to know their machines and how to cut metal.²² What is particularly interesting about these comments is that, through them, Bill reproduced and re-affirmed the craft ethos of the shopfloor. When I told the senior stewards of my interest in new technology, they advised me to talk to "the intelligent machinists".

Some sections of management dismissed the programmers because of their youth and their 'bookish' knowledge. But there may have been some resentment also at the way these young men literally played with the new technology at their fingertips. At that time, Herbert's had a variant of computer-aided programming called Batchcurve. Through a satellite link-up with a computer in the United States, Batchcurve was supposed to eliminate much of the mathematical work for the programmers. However, I was told that as Herbert's terminal was a "second-hand GPO printer", the computer's response rate was only marginally faster than the manual process and, at any event, the technology had been overtaken by 'canned cycles', that is, the instructions for routine machine operations which are pre-programmed into a machine tool's control console. They had sharply reduced the

number of 'blocks' needed to make a program."³ Ray Stanton, a senior engineer at Edgwick, confirmed the success of this particular development. He claimed 'canned cycles' had reduced the average number of blocks in a program from 250-300 in 1972 to 80 by 1979."⁴ But if Batchcurve was of doubtful value to management, that was not the case with the programmers. They used the satellite link-up to play computer games and did so quite openly."⁵ Of course these activities could have had a 'functional' purpose. The argument here is that management may have tolerated these ostensibly non-functional activities because they facilitated the development of computing skills useful to the company. But I suspect that these antics rankled for all that. If so, it could explain why Stanton told me that "we never liked the programmer".⁶ And if there was any hostility between some managers and the programmers, this in turn could explain a curious technical feature of the proto-type versions of the AL-76 I noted during my fieldwork.

AL-76 was the codename given to a machine design Herbert's were developing at that time. Targetted at small and medium-sized firms, the key feature of AL-76 was its facility for manual data input or MDI. This is a variation of CNC in which programming is simplified to enable the machinist to build up a parts program by directly inputting the information into the machine's control panel. The curious feature about the proto-types tested out on the shopfloor at Edgwick was that they had no facility for recording the completed programs. This could have been remedied

quite simply by installing cheap cassette recorders. Instead, the machinists had to record the programs on any bits of paper that came to hand. This provided a rare opportunity for the AUEW stewards to claim a new job-demarcation by insisting that these manuscript records were the machinists' 'property', and that under no circumstances were programmers allowed to look at the programs or take them away. Despite formal complaints from TASS, management made no efforts to resolve the dispute.

Apart from the remarks by the senior manager who confessed a strong dislike for programmers, much that I have described here can be found in other studies of NC in British engineering firms. They suggest there was nothing aberrant about Herbert's use of skilled machinists as NC operators or about the ways in which those workers pushed out the 'frontier of control' at the programmers' expense. For example, Littlefield and Rathmill observed that skilled machinists operated the machines during management's "initial learning period" in the application of NC technology.²⁷ Bhattacharyya made much the same point when he commented on the problems firms experienced in de-bugging the new technology.²⁸ Both Littlefield and Rathmill, and Jones have also commented on the continued need for skilled machinists where the work consists of small batches of difficult-to-machine components.²⁹ Littlefield and Rathmill have also suggested that "current low (pay) differentials between skill groups" has also persuaded managers to employ skilled labour on NC machines since there would be a "negligible difference in operating costs".³⁰ In

a different way, Bryn Jones picked up the same point in his case studies.²² Wilkinson, Littlefield and Rathmill have suggested cases where managers have had no policy on manning and it has been the shopfloor unions which have proved to be a major influence in determining the skill status of the operator.²³ Jones and Wilkinson have observed how, once esconced in front of a CNC machine with tape editing facilities, the skilled machinist may quickly master the new technology and apply his new skills to re-define the division of labour.²⁴ Given the evidence that suggests Herbert's experience in the application of NC and CNC machines was a typical, rather than an aberrant, feature of British engineering firms, there may appear to be no further need to explain the observations of my fieldwork. However, the very different experiences of other firms, including another machine tool company, challenges such an assumption.

For example, I subsequently learned that at the Halifax plant of the American machine tool firm, Warner & Swasey, the managers insisted that a newly-installed machining centre would be operated by semi-skilled labour. Despite subsequent difficulties, such as a high turnover of operators, programming errors and 'bugs' in the software, the firm persisted.²⁵ And in three of his five case studies, Bryn Jones found the managers had actually overcome a range of technical obstacles such as "programmer availability and gaps in tool and metal knowledge" and taken active steps to ensure the operators did not edit the tapes in any way²⁶ which seemed to demonstrate the point one machinist

made to Harley Shaiken: "The equipment is a joke - right up until they get it to work".²² These accounts indicate that it is not enough to say Herbert's used skilled machinists because it was easier, for a whole host of reasons, to do so. Instead, the question has to be asked: why did they take the 'easy' route? This question becomes even more pertinent when attention is focused on Herbert's experience in the application of another computer-based system, CLASS.

The CLASS that failed management

Apart from NC, the other form of computer-based technology I saw which directly affected the production process at Edgwick was an IBM 'package' called CLASS (Computerised Loading and Scheduling System) which was intended to fully computerise a number of management information systems: production scheduling, progress-chasing, stock control and labour performance. From the accounts of shopfloor workers, staff, and production managers it was clear that the introduction of CLASS in 1970 contrasted sharply with the way in which management had applied NC technology.

Herbert's appeared to have been pioneers in this application of the computer, both among local engineering firms and in the British machine tool industry. CLASS represented a major investment in new technology. No details on costs are available,

but it is easy to imagine the scale of the firm's expenditure, both in time and money, on installing a computer system that was supposed to shadow the construction of nearly 30 different types of lathes made from some 60,000 components.³⁷ Furthermore, this project would have been unthinkable at that time without a prior and considerable investment in computer applications to business administration. This was certainly the case with Herbert's. In 1962 Herbert's purchased the IBM 1401, one of the most powerful computers available to business organisations at that time. Between that year and 1970, the accumulative costs of computer hardware were £2.7m and staffing in the firm's Computer Services Division rose from 42 to over 100.³⁸ CLASS was commissioned very quickly³⁹ and members of senior management were not slow to exploit the potential of the system to reduce clerical labour in areas such as stock control.⁴⁰ The stewards' protests about the lack of consultation over the introduction of the system were brushed aside.⁴¹ Similar treatment was given to chargehands' complaints that form-filling was becoming a full-time occupation.⁴²

The system encountered a number of difficulties very quickly because of a cluster of technical, financial and political factors. The near bespoke character of machine tool production did not lend itself to computer control at that time. The process involved in generating the data in 'batch mode' created a long paper chain which, in each link, provided ample scope for human error, accidental or otherwise. On one occasion it was calculated

that to deal with 40,000 components circulating around the plant, "somewhere between 4 and 5 million control documents (were) produced each year" and about 4000 decisions taken each week to update the system.⁴³ To operate effectively this immense bureaucratic system needed stable conditions; but this was far from the case at Edgwick during the early 1970s. Soon after its 'commissioning', the system had to cope with a production process that was disrupted by frequent modifications of machines developed during the late 1960s, the transferral of products from other plants, the senior engineers' experiments in group technology and abrupt changes in production schedules.⁴⁴ A high turnover of punch-card operators - prompted by poor working conditions and low pay - also helped to ensure the weekly reports frequently came out late peppered with inaccuracies.⁴⁵ Other errors were built into the system by the use of 'estimated' jobtimes which had a certain notoriety on the shopfloor and by the chargehands' long-standing practice of manipulating the returns on completed work to ensure stable bonus earnings for their colleagues. Unlike the previous manual system in which separate information systems were used to establish progress and calculate pay, the two were combined with the result that production records were falsified or rather, inaccurately completed, to maintain the operators' bonus earnings.⁴⁶ It is worth noting here that when Barry Wilkinson looked at the computerised scheduling system used at a machine tool plant in Birmingham formerly owned by Herberts, he claimed the major factor behind the failure of that system was this same

combination of information systems on work-in-progress and labour performance.⁴⁷

On numerous occasions the stewards pressed for the restoration of the manual 'white card' system so that data used to calculate pay could be separated from the information system used to establish work-in-progress, but this proposal was rejected on each occasion, as was their request that the jobtimes be measured by outside consultants.⁴⁸ Disenchantment with CLASS was not confined to the stewards. Senior engineers argued that the highly centralised character of CLASS undermined their own initiatives on group technology.⁴⁹ First-line and middle managers complained about the unreliability of the system. One observed that, once given the distinct impression that the system was intended to de-skill and reduce their jobs, the shop clerks adopted a "slavish attitude" towards the data it produced and stopped using their "common sense".⁵⁰ Dr. Austin's remarks about those early days of CLASS typify the views expressed by the middle managers I met:

"(It) was probably one of the final nails in the coffin. It just garbled everything up....and there was absolute chaos on the production side....The old classic of 'garbage in - garbage out'... was certainly true in the Herbert case."

Data on the soaring levels of stock and work-in-progress during this period added pressure to the demand to scrap or alter CLASS in some way. And yet, despite all this, the more powerful

sections of senior management refused to countenance any revisions of the system. For Dr Austin it seemed that:

"No criticism of the computer department, or the computer operation, or the way it was done, was permitted. It was stifled at birth."

No major action was taken until the takeover by the National Enterprise Board in 1975 when the directors had to respond to a report by Herbert's own auditors which endorsed many of the criticisms levelled against the computerised system and also advised management to: carry out immediate stock checks; install manual systems to run in tandem with CLASS; and "study and develop, where applicable, alternative shop scheduling methods to those of CLASS." However, as other matters were seen as much more pressing over the next five years, production staff at Edgwick were encouraged to 'make do' with a combination of computerised and manual systems.

This fierce determination to implement CLASS as originally envisaged demonstrates the inadequacy of the argument that key aspects of NC technology at Edgwick - the minimal expenditure on NC and CNC machines and the use of skilled machinists who then re-defined the division of labour - were the products of an absence of any managerial strategy on new technology, or the outcome of certain technical difficulties and worker resistance (either articulated through the stewards and formal 'union policies' or manifest through individual and covert acts). For

the early history of CLASS demonstrated senior management's readiness to cope with serious technical difficulties and various forms of worker resistance. On the contrary, as I said earlier, the question has to be: why did they refuse to take the 'easy' route on CLASS when they had done so on NC technology? As the answer is based on historical material that will be discussed in some depth in later chapters I will only attempt a brief explanation here.

An Historical Perspective on New Technology at Herbert's

An important point to make at the outset is that there was no one managerial strategy: from 1964 to 1980, corporate management changed three times and each change saw significant amendments of the previous regime's policies alongside some continuities.

From 1957, when the company's founder died, to 1964, the company was managed by 'Herbert's men'. Apart from one non-executive director, they were veteran employees who had gained promotion through Sir Alfred's patronage. As I mentioned earlier, on office administration, Herbert's soon became pioneers in the application of the computer after purchasing a machine that was identical to the one used by the Atomic Energy Authority. But, overall, they made a cautious approach to the reform of the founder's managerial policies. There was little expenditure on product development at Edgwick, largely because the firm still commanded

a dominant, if declining, share of the domestic market for capstan and turret lathes - the plant's main product - and apparently even less was spent on the production process inside the plant's engineering shops. 'Herbert's men' also continued the founder's labour policies, in particular his firm determination to control job-prices. In the tightening labour markets of the 1950s and early 1960s, this had two major effects on the character of the production process. First, it led to a gradual re-skilling of the workforce as Herbert's found it was unable to continue the pre-war practice of recruiting hundreds of 'apprentices' and trainees each year which had served both to reproduce a core of skilled workers imbued with the 'Herbert Spirit' and maintain a large workforce of young and semi-skilled operatives. This process of re-skilling is reflected in figures which indicate a major change in the ratio of semi-skilled to skilled labour: from 4:1 in 1952 to 1.2:1 in 1968.²³ How far these figures reflect changes in the social definitions of skill is a difficult question to answer. However, the gradual disappearance of operational drawings specifically produced for Herbert's semi-skilled operatives suggests that the changing skill composition of the labour force was also related to some material changes in the organisation of work.²⁴ Second, it produced some weakened piecework systems - in which pay was kept close to the district average by means of a substantial shop bonus and systematic overtime - that, in turn, created a workforce of 'satisficers' who developed strong pay norms and relatively low levels of productivity. I would suggest that these

effects of this tacit compromise in capital-labour relations on the shopfloor reinforced managerial conservatism in production technique by encouraging the managers to become increasingly dependent on their (ageing) employees to gain a satisfactory output from ageing machinery.

When Richard Young became Chairman in 1964, his appointment was welcomed by some of the directors as an opportunity to increase the tempo of reform and widen its scope.²² Radical changes were made in many areas of Herbert's activities; but relatively few had a direct impact on production at Edgwick. One exception included the development of eight different turning machines for the Olympia Exhibition in 1968. While concerned about labour productivity and the age of capital equipment at Edgwick, these issues had low priority for Young as he set about 're-modelling Herbert's for the seventies'.

"America wishes you luck!"

Martin Smith, a craft apprentice at that time gave me a graphic account of the age of the machinery at Edgwick then. He told me that he worked in the horizontal milling section, on a Milwaukee machine which appeared to come to Herbert's through the 'Lend-Lease' scheme. On the bedway was stamped the message: "America wishes you luck". When Martin complained about the antiquity of the machine his mates replied that his was the most modern one on the section. It is difficult to know how far Martin

intended his story to be taken literally; but it certainly contains more than an element of truth." In 1975, the firm's auditors found in a 50% survey of the machinery in Herbert's Machine Tool Division that 47% was 20 years old or over." Initially, this situation was not for want of capital or any indifference on the Chairman's part to new techniques. At the time of Young's appointment, Herbert's had £5m in reserves and the Herbert-Ingersoll plant, built on a greenfield site at Daventry in 1968 and regarded as very much Young's personal project, was praised for the modernity of its layout." But most of this capital was put into a series of company takeovers and the joint venture with Ingersoll Milling Inc.. The expansion and 're-modelling' of the Herbert group was premised on strong predictions of a boom in machine tool markets, especially for the motor industry. Instead, the late 1960s saw the onset of a serious trade recession and, before the end of the decade, Herbert's was on the verge of a major cash crisis. In these stringent circumstances the only new machines installed at Edgwick were built there. The combination of the growing antiquity of the machinery with the spate of new designs only increased management's dependence on the skills of the shopfloor. The recession also ensured there was also little scope for increasing productivity through a new payment scheme agreed with the stewards at the beginning of 1969."

Neale Raine's appointment as Chief Executive in 1970 did little to alter crucial features of production and workplace politics at

Edgwick. Pressure from the banks and major shareholders to restore the company's liquidity effectively blocked any plans, if they existed, to up-date capital equipment at the plant. Over the next five years a small number of CNC machine tools were installed and all but three - two machining centres and a NC grinding machine - were built by Herbert's. I mentioned earlier the findings of the auditors' survey on the age of machinery in Herbert's Machine Tool Division; the same report asserted that £5.5m was needed to re-equip Edgwick to "sustain the necessary quantity and quality of production".²⁰ This represented just over half of the sum calculated for all the manufacturing plants in the division and nearly £2m more than the total value of capital equipment (after depreciation) at Herbert's.

Financial stringency was not the only reason for this situation. During the early 1970s, while Raine was pursuing his "survival plan" for Herbert's - which involved 3000 redundancies immediately and, phased over five years, the elimination of all but three factories²¹ - there was considerable discussion within corporate management over a proposal to close Edgwick and transfer production to the smaller (and more manageable) plants at Mackadown Lane and Lutterworth. So, instead of installing new machinery, it made more sense for corporate management to try and increase productivity at Edgwick through organisational means. In part this was attempted through the long experiments with group technology (GT) and the efforts which immediately preceded GT to standardise components made at Edgwick. The elimination of some

of the less viable machines in the product range also contributed to this strategy. But there is no doubt that senior management pinned most of its hopes on the computerised shop-scheduling system. There was, Ron Austin recalled, "an idealistic belief that the computer would solve all their production problems". But, as I hope I have shown, that belief was misplaced. As Ron put it, CLASS was "just digging a deeper and deeper hole for the company to fall into." In essence, then, senior management tried to raise productivity through the organisation of work while leaving the man-machine interface largely unaltered.

This strategy was almost made explicit shortly after the firm's financial collapse and state 'rescue' in 1974. Tony Benn, then Secretary of State at the Department of Industry, insisted that, as a condition for state aid (and eventual takeover), the workforce must participate in the formulation of a "corporate plan" for the firm's future." At one point in the many discussions on this "plan", the stewards were told that the company could emulate the strategy of firms such as Colchester and go for volume production of low technology machines. But the senior managers also made it clear that this was an option they had not seriously explored." Instead, they talked of plans to phase out the semi-automatics - except for the 9C-30 which had a lucrative domestic market - and concentrate on a small range of new CNC designs (the Husky and the Batchmatic Mk II)." I would suggest that management rejected the 'Colchester' option mainly for two reasons. First, it seemed unlikely that the government

would finance the necessary expenditure on capital equipment."* Second, and I think more importantly, the managers were deterred by the skill composition of the workforce and the kind of accommodation they had made with that workforce. It made doubtful economics to employ skilled employees to carry out semi-skilled work and, given past managerial difficulties in organising work, scaling production down was preferable to an expansionary strategy.

In the second half of the 1970s, when Herbert's survived as a subsidiary of the National Enterprise Board, the new corporate management, headed by Walter Lees, made some attempt to up-date machinery at the plant. However, my fieldwork in 1979 suggested that the results were not impressive. A few more CNC and NC machines on the shopfloor did not disguise management's continued dependence on the operatives' skills. And CLASS survived simply because other issues were regarded as more pressing. Gone were the illusions about its potential to provide a relatively cheap means of extending control over production. On the contrary, the system had become just another managerial problem.

From this short account, it should be clear managerial intentions behind the application of new technology cannot be assumed from accounts of that technology's potential to fragment workers' skills and increase managerial control. This case study also indicates some of the limitations of cross-sectional studies of

new technology, such as those offered by Jones and Wilkinson. For Herbert's provides an example of a senior management team that attempted, simultaneously, two contrasting strategies in the application of new technology. A 'snapshot' of factory politics in a variety of engineering factories cannot explain that phenomenon. Indeed, a cross sectional study cannot explain the different forms of workplace politics - the conflicts at one plant, the compromises at another - that it describes. It is necessary, as in this case study, to attempt a 'longitudinal section', or historical approach, to explain those variations and contradictions. To paraphrase Lazonick, it is important to look at the political and economic factors that shaped production in the past and provided the context for the introduction of new technology.

In the circumstances that confronted the firm at the end of the 1960s NC technology did not look like a serious option for ending management's traditional delegated mode of control and tackling Edgwick's low productivity. In a factory housing some 600 machines, NC technology could only bring change in a slow, piecemeal fashion as other equipment wore out - unless, of course, they had £5m (or a little more) in capital reserves which was no longer the case by that time. And the managers were perhaps too familiar with its technical 'bugs' to believe that NC could, at that time, free them from their dependence on workers' practical knowledge and skills. In brief, senior management had neither the time nor money to consider NC technology as a means

of effecting the desired reforms. In contrast, CLASS was relatively cheap and promised a way of extending managerial control right across the shopfloor - and reducing staff levels in production administration - within a matter of months. And, unlike NC technology, Herbert's had yet to learn about the gap between the extravagant claims made on its behalf and its performance. As Edgwick's production difficulties deepened during the early 1970s, those senior managers most closely associated with CLASS seemed to cling to it with more desperate determination. These experiences demonstrated the truth that there were no quick and cheap technical solutions to management's problems at Edgwick. In the second half of the 1970s, the question was: were there any 'solutions' that offered a future for machine tool production at Edgwick? But before considering that question, the next section will look at another way in which new technology may have posed a challenge to labour: as a product. To accomplish that task, there is a need to re-examine the history of the labour process at Edgwick from another perspective.

The labour process and product rationalisation

From the turn of the century until the inter-war years, Herbert's was regarded as exemplary in the machine tool industry not only for its impressive export sales organisation, but also for its adoption of 'American methods' in the productive process.

Specialising in the design and production of lathes, Herbert's was one of the few firms that produced 'standardised' machines in comparatively large batches and made considerable use of semi-skilled labour in doing so.⁶⁷ However, these celebratory accounts failed to note that Edgwick - the firm's largest and, for some time, its sole manufacturing plant - still produced a variety of machine types and tooling accessories, and that there was very little standardisation and commonality of parts in Herbert's products despite the strong vertical integration of production at the plant. Nearly all the parts for each machine were cast, machined and assembled at Edgwick. To build the 2D capstan lathe, for example, Herbert's bought-in only electric motors, ball bearings, belts and washers.⁶⁸

By the mid-1960s some product rationalisation had taken place. The plant built lathes exclusively, though in 17 different designs⁶⁹ and Nol Factory at Edgwick, controlled by another part of the Herbert group, continued to produce tools and accessories.

By this time, some of the machines were fitted with either NC or 'plugboard' controls. (The latter was an electro-mechanical control system which, though developed after NC, occupied an intermediate technological position between the conventional semi-automatics and NC machines.⁷⁰) As stated earlier, management made little attempt to directly apply this new technology to the productive process itself. But the designs of the new machines must have had some impact on the organisation of work. The

control panels of the 'plugboard' and NC machines were made outside Edgwick. The bits and pieces of the servo-systems - the ball-screws and hydraulics, for example - were bought-in, too. Then, in the early 1970s, the engineers adapted the technology of the DC-drive to Herbert's turning machines which allowed the designers to reduce the number of gears and shafts in Herbert's machines.²² So, while the technology of the control systems became increasingly sophisticated - the control console for the Batchmatic 75-250, launched by Herbert's in 1972 as the world's first CNC lathe²³ was a mini-computer - the mechanical parts, the only bits made at Edgwick, became simpler.²⁴ By 1975 one third of the 60,000 components handled at Edgwick was bought-in.²⁵ While these figures suggest the machine designs had a potential to 'save' labour in the machine shop, it is not clear that the designs led to labour cuts across the plant since the new designs required more assembly work. The 2D needed approximately 1000 parts, the 4 Senior needed 1500, while the average for the Batchmatica was 2000 components.²⁶ Unfortunately, it is difficult to establish how much more assembly work was created at Edgwick by the Batchmatic design.

Another potential means of 'saving' labour came through the senior engineers' experiments with group technology, the cellular organisation of plant machines. Though GT made its own distinctive contribution to Herbert's malaise, it also contributed to the rationalisation of production. Before moving the machinery around the shopfloor, the parts made at Edgwick had

to be grouped into 'families'. This exercise provided the information needed to standardise components and try to achieve commonality of parts between machine designs.^{7*}

Licensing agreements provided another means of rationalising production at Edgwick. Before the end of the 1960s, Herbert-designed semi-automatic lathes were being built under license in India.⁷⁷ However, it seems that progress was slow on this deal for in 1975 Herbert's was still supplying CKD kits of the 2D to Mysore Kirloskar. In the early 1970s, management appeared anxious to pursue this tactic further. One deal was concluded with an Iranian agency⁷⁸ and the possibilities of fixing similar licensing agreements with companies in Egypt, Czechoslovakia, and Mexico were explored; but little seemed to have happened by 1975.⁸⁰ (The stewards were told that, as rival firms abroad had discovered, such deals were needed to maintain, and hopefully develop, trading links with countries determined to establish their own machine tool industries.⁸² There was no need to explain that such deals also allowed further savings in labour at Edgwick.)

However, there is no evidence that the potential labour-savings of all these measures were realised before the company's collapse and state rescue in 1974, or, to be more precise, if there were savings they were not made manifest. On the contrary, the fragmentary data on sales and manpower made available to me suggest that by the end of 1974, when nearly 50% of the orders

were for NC and 'plugboard' machines," labour productivity across the plant had declined. In the 1950s, I was told, some 1,000 employees at Edgwick built about 2,000 low technology machines, mostly semi-automatic lathes." In rather more exact terms, documentary sources indicate that in 1974/5, when the machine tool plant employed 2,300 workers " it received orders for only 672 machines (excluding 'carcasses', ie, the main body of the machine)" though the TASS stewards estimated the plant had the capacity to produce double that number of machines." If the union's estimate was accurate, the figures indicate a decline in output per employee from 0.7 machines to 0.5.

Perhaps no-one should be surprised by these figures on productivity. The early 1970s witnessed a period of profound crisis for corporate management and nowhere, it seems, was this more evident than at Edgwick. Plant-level management then had to cope with the apparently endless modifications of machines launched in 1968 (a product of "the debacle of the 1968 era")", with the transfer of machine designs from the crumbling outposts of the Herbert 'empire', and with the errors generated through the computerisation of production control. But by 1979, after four years in which £57m of state funds had been used to restructure the company, it was a different story.

During my fieldwork both the managers and stewards I spoke to commented on the many ways in which product design had reduced the labour content overall and increased the proportion of

bought-in components. On the latter point, I was told, for example, that the tooling stations on Herbert's new low-cost CNC lathe, the Husky, were made in West Germany. Prior to my visit, the latest series of redundancies - which had cut the workforce to little over 1000 - had been explained by management as the direct consequence of a continuing need to rationalise the plant's product range. Furthermore no effort was made to conceal or deny plans to continue that process even further by concentrating, almost exclusively, on the construction of CNC machines that would halve the current the labour force.** (The managers intended to continue the production of the 9C-30, a semi-automatic oil lathe, because predictions about the domestic market were good.) An output of 500 CNC machines could be produced, I was informed, by just 500 workers - clearly a significant improvement on productivity.**

Conclusions: A Redundant Analysis and the Riddle of the Stewards'

Passivity

In the course of my fieldwork I came to the conclusion that the application of computer-based systems to the production process had neither proved a "job-killer" nor resulted in a significant extension of managerial control over production at Edgwick. It was new technology as a product, rather than a piece of capital equipment, that provided the opportunities for management to increase labour productivity and, because of the Herbert's

declining share of the the markets, cause major job-losses. But, at the time, I had the feeling that this knowledge was somehow redundant which, for me, was a far more important observation. As I said earlier, at the start of the fieldwork I had hoped the project would provide a fresh opportunity for the Workshop to break the political inertia that gripped the Machine Tool Committee. Yet, it was obvious, long before management asked me to terminate the fieldwork at Edgwick, that this was not going to happen - not even at Herbert's where the best prospects for the Workshop's hopes lay. It is this point that brings me to the conclusion of this chapter.

From my discussions with the senior stewards of the office and shopfloor unions, it was obvious that they were very well aware of the direction of management's strategy for Edgwick and its consequences for their members' jobs. The point that seemed to concern them most was not the threat of another 500 redundancies - after a decade of cuts that did not appear particularly alarming - but the doubtful viability of management's strategy. The chair of the staff unions committee pointed out that the fixed overheads would make production uneconomic. The plant was built to produce over 5000 machines each year and not 500.²⁰ Aware of the strong and intensifying competition in world markets for CNC machines, the works convenor criticised management for "putting all their eggs in one basket".²¹ At the time, both criticisms were sustained by evidence of the continuing market gains of Japanese firms that

had decided to emulate the 'mass production' techniques of the Krasni Proletari factory at Moscow where, in the late 1950s, 1000 workers produced 12,000 lathes each year.** A confidential report presented to the NEB in 1979 also cast doubt on the viability of management's strategy at Herbert's.** Subsequent events, after the Edgwick plant was purchased by Tooling Investments, confirmed the accuracy of that analysis. When, in April 1983, a receiver was appointed to deal with Herbert's final bankruptcy, the *Guardian* commented:

*"It's the old, old story - Britain has simply fallen behind in modernising its technology; it has failed to invest in advanced production techniques, and where it has - as with Alfred Herbert's production of computer numerically controlled (CNC) machine tools - it does not produce enough to compete. Herbert's annual production of CNC machines is equal to just one month's of the leading Japanese exporter."***

The stewards were also fully aware of the significance of the Tory government's election for the future of the entire company. They realised that the NEB, anxious about its own survival, was likely to refuse further funding to its "problem company". And yet, for all their critical insights into the firm's malaise, for all their rebukes of managerial incompetence, the stewards remained curiously passive as a kind of 'loyal opposition' to management's strategy of rationalisation and re-organisation. A few of the senior stewards were prepared to discuss with the Workshop current left-wing ideas about how to fight redundancies;

but no action flowed from those debates. Instead, at EC meetings, they stuck to what one steward called, the "bread and butter issues" such as the pursuit of the current pay claim. When the stewards talked of the imminent redundancies it was as if they were a part of the political terrain set by management, something that made other tasks more difficult. From my superficial knowledge of workplace politics in engineering firms elsewhere in the West Midlands, it was a depressingly familiar situation; but one I did not fully understand. Without appreciating the methodological link with the study of new technology at Herbert's, I realised that if I wanted an explanation I would have to search for clues through the history of workplace politics at Edgwick.

The next chapter begins that search at the point of Alfred Herbert's earliest days as an entrepreneur. This is not because it is conventional to start a narrative at the beginning. My main reasons are twofold: the first is based on observation, the second on logic. First, Herbert's seemed to be a firm dominated by its past - an observation made by other 'Herbert watchers'.²² During my fieldwork I was impressed by both the managers' and stewards' consciousness of the firm's history and how they used it to measure the depth of their current crisis. This indicated that it would be necessary for me to come to terms with that history so that I could evaluate the political significance of their accounts. My second point is that if ideas about the firm's founder remained an important influence at the close of the

1970s, it would be logical to begin that historical study by carefully examining his early strategies as an entrepreneur since they would have shaped the terrain for the development of workplace politics.

Chapter Two: Endnotes and References

1. Coventry Workshop, *Crisis in Engineering: Machine Tool Workers Fight for Jobs* (Nottingham: Institute for Workers' Control, 1979), p. 25.
2. See, for example, "Government Aid for Ailing Machine Tool Maker Alfred Herbert", *Times*, 30 October 1974.
3. Geoffrey Foster, "Heirs of Alfred Herbert", *Management Today*, May 1982, p. 68.
4. Harry Braverman, *Labor and Monopoly Capital* (New York: Monthly Review Press, 1974), p. 197.
5. William Lazonick, "Industrial Relations and Technical Change: The Case of the Self-Acting Mule", *Cambridge Journal of Economics* 3 (1979), pp. 258-9.
6. Braverman, *Labor*, pp. 199-202.
7. *Ibid.*, p. 203.
8. Lazonick, "Industrial Relations", p. 257.
9. *Ibid.*, p. 258.
10. Bernard Elbaum, William Lazonick, Frank Wilkinson, and Jonathan Zeitlin, "The Labour Process, Market Structure and Marxist Theory", *Cambridge Journal of Economics* 3 (1979), pp. 227-8.
11. A claim made by several staff workers at Herbert's during the course of my fieldwork.
12. The Minutes of the Meeting of the Edgwick Site Consultative

Committee, Herbert Machine Tool Division, held on 30 June 1975 record the statement by R.J. Morston that prior to the experiments with group technology there were 600 plant machines on site.

13. Sid Birch, interview held on 19 June 1982.
14. S.K. Bhattacharyya, "Penetration and Utilisation of NC/CNC Machine Tools in British Industry" (unpublished report, University of Birmingham, 1980), p. 8.
15. Roy McCall, interviewed during fieldwork at Herbert's.
16. Harley Shaiken, "Impact of New Technologies on Employees and Their Organisations" (preprint, International Institute for Comparative Social Research, 1979), p. 22.
17. Ibid., p. 8.
18. Ibid., p. 6.
19. Geoffrey Buckler, interviewed during fieldwork at Herbert's.
20. Ibid.
21. Frank W. Craven, "The Use of NC in Group Technology" (unpublished paper, Herbert Machine Tools Limited, n.d.) sect. 3.(d)
22. Bill White, interviewed during fieldwork.
23. Geoffrey Buckler, op. cit.
24. Ray Stanton, interviewed during fieldwork.
25. In my brief visit to Herbert's "Batchcurve Room" Geoff invited me to play "Hangman" and "Bullfight". Afterwards, another programmer asked - across the floor of the Production Control Office - if we had played "Battleships".
26. Ray Stanton, op. cit.

- 27 Tom Littlefield and Keith Rathmill, "The Financial Justification of NC Turning Machines", *Production Engineer* (April 1978), p. 20.
- 28 S.R. Bhattacharyya, "MC/CNC Machine Tools", p. 4.
- 29 Littlefield and Rathmill, "Financial Justification", p. 20; Bryn Jones, "Destruction or Re-Distribution of Engineering Skills? The Case of Numerical Control", in *The Degradation of Work? Skill, Deskillling and the Labour Process*, (ed.) Stephen Wood (London: Hutchinson, 1982), pp. 193, 199.
- 30 Littlefield and Rathmill, op. cit. In relation to American engineering firms during the mid-1970s, David F. Noble also observed, though without offering much by way of explanation, that: "The most skilled now operate N/C machines in union and non-union shops alike, despite initial efforts to use unskilled people." "Before the Fact: Social Choice in Machine Design", paper delivered at the National Convention of the Organisation of American Historians, April 1978, p. 23.
- 31 Jones, "Destruction or Re-Distribution", p. 191
- 32 Barry Wilkinson, "Technical Change and Work Organisation", 2 vols. (Ph.D. thesis, University of Aston, November 1981), 2,152, 156, 159.; Littlefield and Rathmill, op. cit.
- 33 Jones, "Destruction or Re-Distribution", pp. 195-6, 200; Wilkinson, "Technical Change", 2,158-9.
- 34 John Darnbrook, formerly a parts programmer at Warner & Swasey's Halifax plant during the early 1970s, interviewed on 20 February 1981.

- 35 Jones, "Destruction or Re-Distribution", p. 195.
- 36 Shaiken, "Impact of New Technologies", p. 28.
- 37 The Minutes of the Meeting of the Edgwick Site Consultative Committee, Herbert Machine Tool Division, held on 30 June 1975; and Minutes of the Meeting on 20 May 1975.
- 38 Doug Howell, formerly a technical worker in Computer Services Division (CSD), interviewed during fieldwork; Ray Hill, formerly manager of CSD, interviewed during fieldwork; see also undated manuscript notes produced by Ray Hill.
- 39 Ron Austin, co-designer of the Batchmatic 50, customer liaison officer for Churchill grinding machines during the early 1970s, interview held on 22 July 1982; see also chapter 8.
- 40 Ron Hatfield, formerly assistant technical sales manager, interviewed during fieldwork; Ron Hurst, formerly stock control manager, also interviewed during fieldwork.
- 41 See chapter 8.
- 42 Ibid.; Ron Doughty, interview held in March 1981.
- 43 The Minutes of the Meeting of the Edgwick Site Consultative Committee, Herbert Machine Tool Division, held on 30 June 1975.
- 44 R.J. Cattle, H.M.T. Director, memorandum to B.L. Short and R.G. Doughty, Joint Chairmen, Edgwick Site Consultative Committee, 28 January 1975; Ron Austin, interview; Bill Elliston, fitter-chargehand in the 1960s and early 1970s, interviewed on 12 June 1982; Pat Weare, sales engineer in early 1970s, interview held on 29 June 1982.

- 45 Alan Bean, production control manager, interviewed during fieldwork.
- 46 Ron Doughty, interview held in March 1981.
- 47 Wilkinson, "Technical Change", 2,184-5.
- 48 See chapter 8.
- 49 Roy McCall, formerly Engineering Support Director in 1979, interview held on 21 October 1981.
- 50 Frank W. Craven, formerly Planning and Development Director in early 1970s, interviewed on 19 July 1982; Ron Hurst, interviewed during fieldwork.
- 51 Ron Austin, interview.
- 52 Peat, Marwick, Mitchell & Co., "Alfred Herbert Limited", Appendices to Draft Document for Discussion, 7 March 1975, 4/37-8.
- 53 See chapter 5.
- 54 'Colin' Wright, interviewed during fieldwork.
- 55 Hugh Sephton, a main board director in 1974, interview held on 8 June 1981.
- 56 Martin Smith, craft apprentice at Edgwick in mid-1960s, interviewed on 19 May 1981.
- 57 Peat, Marwick, Mitchell & Co., "Alfred Herbert", 4/32-4.
- 58 "Alfred Herbert Wants to Unload a White Elephant", *Investors' Chronicle*, 4 March 1972; also given an honourable mention in R.M. Bell's *Changing Technology and Manpower Requirements in the Engineering Industry* (Watford: Engineering Industry Training Board, 1972), Diagram 22, p. 77. In the firm's Report and Accounts 1968, p. 4, Young

claimed that the plant had won a CBI award as one of the ten best plants built in 1967.

59 See chapter 7.

60 Peat, Marwick, Mitchell & Co., "Alfred Herbert", 4/33.

61 "Alfred Herbert: Survival Before Profits", *Sunday Times*, 30 April 1972.

62 Ron Austin, interview.

63 See chapter 9.

64 An inference drawn from the Minutes of the Meeting of the Edgwick Site Consultative Committee held on 22 January 1975, p. 4.

65 G.V. Bloomfield, then a main board director, presented two papers to the Group Consultative Committee, in December 1974, which outlined management's strategy: "Machine Tools - Engineering Strategy, 1974-1977", and "Long Term Machine Tool Product Development".

66 This point is stated explicitly by R.J. Cattle, then a main board director, to the Edgwick Site Consultative Committee. See, Minutes of the Meeting held on 22 January 1975, p. 4.

67 See chapter 3.

68 Derek Orrell, production engineer, interviewed during fieldwork.

69 R.J. Cattle, memorandum, p. 5.

70 R.M. Bell, *Changing Technology*, pp. 37-8; see also Erik Christensen's *Automation and the Workers* (London: Labour Research Department, 1968), pp. 13, 15, 21-2.

71 Don Smith, Drawing Office manager, interviewed during

fieldwork.

- 72 Eric J. Wightman, Technical Director of Herbert Machine Tools Ltd. (HMT) in the early 1970s, "Benefits of Computer Numerical Control (CNC) for Machine Tools", an unpublished paper printed by HMT, also undated, pp. 2-3.
- 73 Ron Austin, interview.
- 74 Minutes of the Edgwick Site Consultative Committee held on 20 May 1975, p. 3.
- 75 Ibid.
- 76 W.A. Hawkins, "Herbert's Big Switch to GT", an article re-printed by HMT without indicating its original source or date.
- 77 Nick Tew, TASS steward in the mid-1970s, personal letter.
- 78 G.V. Bloomfield, "Machine Tools - Engineering Strategy", section 4.1.
- 79 Neale Raine, "Marketing", a paper presented to the Group Consultative Committee in December 1974, p. 2.
- 80 David J. Lambert, "HMT Export Plan 1974/75", a paper presented to the Group Consultative Committee in December 1974 (?), pp. 18, 22-3.
- 81 Neale Raine, "Marketing".
- 82 Minutes of the Edgwick Site Consultative Committee held on 11 February 1975, p. 2.
- 83 Ray Stanton, interview.
- 84 Peat, Marwick, Mitchell & Co., "Alfred Herbert", Appendices 2/7.
- 85 Minutes of the Edgwick Site Consultative Committee held on

- 11 February 1975, p. 2.
- 86 AUEW/TASS, HMT, Coventry, "1000 Plus Machine Tools From Edgwick Site", a paper presented to the Edgwick Site Consultative Committee, 10 February 1975, p. 1.
- 87 Eric J. Wightman et al, "Proposed Business Plan: Herbert Machine Tool Limited - 1975/80", a paper compiled by Engineering Management, HMT, 14 February 1975, p. 1.
- 88 Ray Stanton, interview; also John Faulkner, personnel manager at Edgwick, interviewed during fieldwork.
- 89 Ray Stanton, interview.
- 90 Ubcas Abrol, interviewed during fieldwork.
- 91 Ron Doughty, interviewed during fieldwork.
- 92 For an account of the Soviet industry, see Seymour Melman, "The Machinery Makers", *Listener* 62(26 November 1959); *idem*, "Preliminary Consideration of the Possibility of Making Economic and Technical Surveys of the Machine Tool Industries in Member Countries", EPA Project No 420, a paper presented to the Director of the European Productivity Agency, 23 October 1959.
- 93 Geoffrey Foster, "Heirs of Alfred Herbert", p. 68.
- 94 The "leading Japanese exporter" referred to in this passage was Okuma which, according to another article on the same page, entitled "Machine Tool Firms in Collapse", produced on average 200 CNC lathes each month. For similarly brief, but evocative accounts of the Japanese machine tool industry, see also, Coventry Workshop, *Crisis in Engineering*, p. 25; and a report produced by the West Midland County Council's

Economic Development Unit, entitled "The Machine Tool Industry in the West Midlands: A Preliminary Study", December 1983, p. 44.

- 95 See John McGrath Davies, "A Twentieth Century Paternalist: Alfred Herbert and the Skilled Coventry Workman", and Stephen Tolliday, "High Tide and After: Coventry's Engineering Workers and Shopfloor Bargaining, 1945-80", in *Life and Labour in a Twentieth Century City: The Experience of Coventry*, (eds.) Bill Lancaster and Tony Mason (Coventry: Cryfield Press, undated). See also Roger Williams' report to the National Board for Prices and Incomes, Case Study Number 6, January 1968.

CHAPTER THREE: HERBERT'S EARLY YEARS, FROM HEROIC PHASE TO
CONSOLIDATION.

Introduction

In the previous chapter I argued that to understand the stewards' passivity in the face of imminent redundancies it was necessary to re-examine the firm's history and that the startingpoint for such a task was Alfred Herbert's early years as an entrepreneur. To achieve that aim this chapter is divided into two main sections. The first deals with what could be called the heroic phase of Herbert's early years. The second section looks at its period of consolidation. Where their histories of the machine tool industry touch on Herbert's early years, both Saul and Floud describe an "outstanding" success story attributable, "in large measure", to the founder's personal abilities and luck¹ and his adoption of "American methods of manufacture".² By re-interpreting the information presented in their accounts, and drawing on new material provided by Davies, the first section of this chapter will try to qualify that celebratory account by developing, as its main argument, the proposition that Alfred Herbert was an opportunist who knew how to exploit family and business links in exceptionally favourable circumstances. The second section extends the chronology beyond the 'heroic phase' of the firm's growth to its period of consolidation during the inter-war period

and, in doing so, challenges Aldcroft's 'progressive' image of Herbert's by pointing to the first, ominous signs of the company's managerial conservatism.

Heroic Beginnings

The conventional account of Herbert's success story begins with an obligatory reference to his "humble origins". In 1887, Alfred Herbert, then 21 years of age, quit his apprenticeship at "a very ordinary engineering firm" in Leicester to become works manager at a business in Coventry.³ There he found 12 men⁴ principally involved in the repair and production of small boilers, and the hire of a steam roller and two sets of steam ploughing tackle.⁵ With "a small amount of capital" from their respective fathers, Herbert and a former schoolfriend and fellow apprentice, William Hubbard, formed a partnership and took over the business in 1889. They began to make machinery for the cycle industry; but Hubbard also designed some "rather interesting machines" for use in the local ribbon trade and others for picking, sizing and sorting pills. Five years later the partnership dissolved: Hubbard returned to Leicester; and the company became Alfred Herbert Limited.⁶ By 1897, there were 500 employees at the works. Six years later, the number had risen to 930,⁷ and by 1914 it had more than doubled to 2000 employees.⁸

This expansion mirrored the dramatic growth in sales. In addition

to its considerable success as an agent for other companies, notably American machine tool firms, Herbert's enjoyed comparable results in the turnover of its own products. Sales of Herbert machine tools passed £50,000 by 1898, more than doubled by 1902 and passed £300,000 a decade later. By 1913, its output was two and a half times that of its nearest rivals.⁹

As well as charting the company's growth, Floud quotes contemporary comments on the company's progressive technique and product design. Even before the end of the century Herbert's was praised as a firm that followed "American methods of manufacture perhaps more closely than any other machine tool makers in this country";¹⁰ and when G.L.Carden toured many European engineering works on the US government's behalf in 1909-1910, he commented:

"There is no denying that the Herbert machine tools, and in particular the turret lathe of this firm, are strong competitors of the best work turned out from American shops."¹¹

'Self-made man' or beneficiary of family ties?

While both Floud and Saul are fulsome in their praise of Alfred Herbert's achievements, nevertheless their studies - when linked principally with Davies' research - provide strong reasons for qualifying that acclaim and developing the counter argument that he was the beneficiary of some exceptionally helpful family

connections.

In the last quarter of the nineteenth century, entry into the machine tool industry was comparatively easy on each of three basic prerequisites. The first, Floud claims, was a level of technical expertise which could be acquired through practical activity. Among Herbert's contemporaries, nearly all successful entrepreneurs in the industry began their careers as premium apprentices.²² The second, capital, also posed little difficulty for middle class families: a relatively small amount of money was sufficient to purchase the basic machinery. For example, Wilson Lathes of Halifax began with a capital outlay of £300.²³ In comparison, when Herbert and Hubbard launched their business, they were provided with £2000 from each of their fathers.²⁴ The third prerequisite for entry into the industry, the availability of skilled labour, would have presented little or no problems to a fledgling enterprise such as Herbert & Hubbard. In general, Floud found no evidence that labour supply impeded any of the machine tool firms;²⁵ but it is likely that Herbert particularly benefitted from the decline of the local watch-making industry.²⁶

If entry into the machine tool industry was comparatively easy, Saul's research suggests that the inducement to do so at the turn of the century was apparent. During the 1890s, the rise of the cycle industry and then the motor industry, developments in electrical engineering, the demands of steam-turbine and gas- and oil-engine builders created a steady rise in the home market for

machine tools.¹⁷ The rewards for those who could respond to this surge in investment were remarkable. From 1890 to 1900, the output of the nine largest machine tool firms trebled, and grew two and a half times again over the next 14 years.¹⁸

While it is true that this boom created favourable conditions for machine tool firms across the country, it also seems the case that a machine tool builder was literally placed at an advantage to his rivals if his business was located close to new and expanding engineering firms. For, as Floud has argued, before 1914 the British manufacture of machine tools was characterised by firms which specialised in the production of a range of machinery which were customised to meet the specific needs of a particular set of local firms.¹⁹ The benefits and disbenefits of this kind of double specialisation have been the subject of some debate.²⁰ But for those placed like Herbert & Hubbard, the advantages were clear.

During the 1880s and 1890s, Coventry was the main location of Britain's bicycle industry which,²¹ with the development of the 'safety' bicycle and the pneumatic tyre, suddenly discovered a new, mass market. In 1881, 400 of Coventry's workers were employed in the production of bicycles. By 1891, the number had risen tenfold and by 1907 it had reached 6000 or 18.5% of the city's total working population.²² In the initial period of expansion during the 1880s, it seems that, contrary to the firm's "American" image, Herbert & Hubbard responded in a way that

fitted in with the 'British system'. This is how Herbert described those early years:

*"About this time, the bicycle industry entered on the beginnings of its serious development and a demand arose for machine tools suitable for bicycle making...
"Simple capstan lathes were...produced (at Herbert & Hubbard) as well as hub drilling machines, rim drilling machines, hub tapping machines, spoke screwing machines, ball grinding machines, hub boring and recessing machines and a variety of other machines of a more or less specialised character."*²¹

In addition, the company produced mudguards on a large scale: "at one period," Herbert wrote, "we were making and selling three or four tons a weeks of these articles."²²

During the 1890s, as the cycle boom quickened, this 'system' broke down to some degree. Local machine tool builders were unable to satisfy the volume of demand, or match the new designs of labour-saving machinery from America. Hundreds of American machine tools were imported. Exports to Britain from four leading American firms rose from £86,165 in 1895 to £337,528 in 1897.²³

With characteristic opportunism - more on this point later - the newly-formed company Alfred Herbert Limited, responded in two ways: by securing agency agreements with some of the leading American firms, such as Lodge & Davies;²⁴ and by imitating those machine designs which were in most demand.²⁵ To further the

latter objective, Herbert recruited the talents of an American engineer, Oscar Harmer, in 1897. His appointment, Herbert wrote, "lead to a rapid development of Herbert Capstan and Turret Lathes".²⁸

The cycle boom burst at the end of the 1890s, and Coventry experienced a short recession; but the surviving, larger firms began switching to the production of motor cycles and motor cars. By 1911, Coventry had around 6000 bicycle workers and 7000 car workers (approximately a quarter of its total workforce), while Birmingham, the second largest location of the motor industry, had 5000 car workers.²⁹ As Herbert put it, this new industry "further stimulated" the development of the firm's capstan and turret lathes.³⁰

As I mentioned earlier, in their separate accounts of Herbert's "phenomenal" rise, Saul and Floud drew attention to some of the circumstances which made that success possible: the ease of entry into the industry at that time, and the character of the 'British system' of machine tool production which placed Herbert's at a distinct advantage to its rivals because it was located in the centre of, first, the cycle industry, then the motor industry. It is also worth mentioning that Saul recognised that Alfred Herbert gained from the remarkable, technical skills of two of his associates; first Hubbard and then Harmer. However, both historians managed to adopt an uncritical attitude towards Herbert's autobiographical notes and overstate the significance

of luck and the founder's personal qualities as causal factors in the rise of Alfred Herbert Limited.

For example, Floud wrote that the company went into machine tool production "by accident".²¹ Similarly, Saul wrote that "luck played a part" in the deal over the sale of weldless steel tubes - a comment made all the more remarkable for the fact that in the same sentence Saul referred to the role of Herbert's brother, William, in fixing the deal.²² And when Saul asked what were the reasons for Herbert's rapid success, he offered this answer:

"In large measure it undoubtedly arose from the personal magnetism of Herbert himself. His origins were humble enough - an apprenticeship with a very ordinary engineering firm and £2000 from his father to buy a partnership."²³

This image of Herbert as a self-made man, rising from "humble origins" was something that Herbert himself consciously cultivated. In his study of the company's early years, Davies, a former Herbert apprentice himself, found that through his speeches and his writings in the firm's house journal, Alfred Herbert gave the impression that success came through personal thrift, self-discipline and hard work. Davies observed:

"In an article written in 1929 for example, entitled 'Thoughts for Young Engineers' he urged his workforce to remember that 'the world is full of men who started life with no chance at all except their own courage and determination'. Elsewhere he declared rich parents to be 'an absolute

handicap' for young people with ambition."²⁴

Davies found these pronouncements fitted ill with the findings from his own research.²⁵ Alfred was born in 1866, the son of a prosperous farmer who owned a 'town house' in a 'salubrious area' of Leicester and remained connected with a modestly successful building firm managed by the senior members of the Herbert family. As Richardson put it, Alfred was born into "the comfortable middle class which the Industrial Revolution produced in Victorian England".²⁶ Alfred was educated at a good, private school in Leicester, and seemed destined for university and ultimately the clergy until he saw an old friend, William Hubbard, working on a lathe at Jessop & Sons. Fascinated by the 'mechanical arts', Alfred persuaded his father to let him pursue a career in engineering. Soon Alfred joined the firm as a premium apprentice. And though, in some respects, it was "very ordinary", Jessop's was one of the few firms in Leicester that provided technical training adequate for would-be entrepreneurs.²⁷ From there, Alfred planned to seek a position at his brother William's Premier Cycle Company in Coventry; but, finding "no opening at my brother's concern",²⁸ he accepted the appointment of works manager at Coles & Matthews with a view to taking it over a year later. Davies believes that, contrary to Herbert's account, this move was very carefully planned by brother William. At that time the Premier Cycle Company was highly successful - by 1894 it was producing over 20,000 cycles a year at plants in Coventry, Nuremberg and Bohemia - and should have found, quite easily, a

position for a close relative. Instead, William arranged matters so that Alfred could take over a small engineering firm in Coventry and begin producing machinery for the cycle trade, with sales to the Premier Cycle Company virtually guaranteed. In accordance with this plan, Alfred quit his apprenticeship prematurely - an unusual action in those days - and moved to Coles & Matthews in 1887. A year later, Matthews, the sole remaining proprietor of this former partnership, decided to accept a position at the Premier Cycle Company's Nuremberg plant. He offered to sell his business to Alfred for "a relatively small amount". In 1889, Alfred bought the firm in partnership with William Hubbard and, as I mentioned earlier, their respective fathers provided £2000 each to launch the venture. A year, or at most, two years later, brother William arranged matters again when he introduced Alfred to Monsieur Scretan, the president of a French company that produced weldless steel tubes for the cycle industry. From this meeting Herbert & Hubbard secured the UK agency for these tubes. It was a lucrative arrangement for the British partners. In 1891, it yielded a net profit of £5,712, an amount equal to almost three quarters of the firm's machine tool output.³⁰ By 1894, Herbert & Hubbard was on the road to success; but Hubbard chose that moment to return to Leicester - possibly because of Alfred's 'autocratic' behaviour and perhaps because, as Davies put it, he felt overpowered by the influence of the Herbert family. At any event, on 17 July 1894, when the shareholders of Alfred Herbert Limited held their first annual general meeting, those present were: William Henry Herbert,

Fannie Millicent Herbert, Ellen Adela Herbert, William Herbert, Sarah Ann Herbert, Alfred Edward Herbert, Frank Floyd (Alfred's father-in-law) and J.M.Marston (Herbert's new works manager).

It would be wrong to suggest that this account shows the rise of Alfred Herbert Limited owed nothing whatsoever to the founder's personal abilities. If he was not entirely 'self-made', neither was he the mindless beneficiary of other people's machinations. Instead, Herbert appears to have been a person who knew how to use an intricate network of family and business contacts to build an "outstanding" success from a set of exceptionally favourable circumstances.⁴⁰

Beyond the 'Heroic Phase' to Consolidation and Conservatism

The 1914-18 war saw a continuation of Herbert's success story. In 1915, Alfred Herbert was appointed Controller of Machine Tools at the Ministry of Munitions. In effect, this made him principal adviser from private industry to a government department that was charged with the task of re-organising and rationalising machine tool production across the industry to meet the needs of the war effort. The appointment was a recognition of both Alfred's personal, political influence and the pre-eminence of his company within the industry.⁴¹ Alfred must also have been gratified by the rise in Herbert's profits during the war, from just over £100,000 in 1914 to £220,000 in 1916.⁴² There is no doubt that

this was linked with an expansion of production at the Butts plant; but the scale of that expansion can only be surmised from fragmentary data. In 1914, Herbert's employed some 2000 workers. By 1921, in the middle of a sharp, post-war recession, employment stood at 2,700.⁴³

Herbert's did not escape the effects of that recession. After a profit of nearly £230,000 in 1919, the company suffered losses of £33,000 in 1920 and £21,000 the following year.⁴⁴

During the 1920s, the decline of Britain's traditional industries affected the fortunes of some of the major machine tool companies and generally depressed demand in the home market.⁴⁵ But, for Herbert's, the period from 1923 to 1929 was one in which the firm enjoyed a steady growth in demand for its products - particularly its range of automatic and semi-automatic lathes - as a result of the domestic growth of the motor, aircraft and electrical industries, which were located chiefly in the Midlands and Greater London, and the sudden expansion of international trade.⁴⁶ During this period, Herbert's transferred production and administration from its crowded, city-centre premises at Upper York Street, the site of its original workshop, to a vast, single-storey building complex at Edgwick on the periphery of Coventry. This move was paralleled by those of other, major firms in the Midlands and Home Counties,⁴⁷ and though it took place in 1928, it was the culmination of a process that had gone on for nearly 30 years.

First, in 1889, a small foundry and a patternshop were built at Edgwick.²² Then a 'factory' was added during the 1914-18 War. (The 'factory' gained its tag through the fact that its predominantly female workforce was involved in the large batch production of tools and simple drilling machines.²³) Later, a heavy machine shop made a further addition to the site. This development allowed the company to develop a range of machines, such as the Atritor, that could not have been built at the Butts because of the difficulties of installing adequate craneage facilities in a crowded, multi-storey building. The first Atritors, rock-pulverising machines originally developed for the Portland Cement Company, were relatively small machines of 200-300lb capacity; but by the early 1930s, machines of 10 tons and more were being built to serve as coal-pulverisers for power stations.²⁴ The final stage in the development of the Edgwick site came in 1928 when a large extension was built onto the heavy machine shop to create a combined machine- and fitting shop that was 30 bays in length.²⁵

Soon after the transfer was completed, Herbert's sank into the second major recession of the inter-war period. From profits of £294,000 in 1930, Herbert's made a loss of £38,000 in 1931.²⁶ This paralleled the experiences of other machine tool firms in Britain. Between 1929 and 1933, production of machine tools in the UK was roughly halved.²⁷ However, first the Soviet industrialisation programme,²⁸ then the re-armament drive in

Britain quickly and dramatically reversed Herbert's fortunes." By 1935, company profits stood at £242,000; two years later they were nearly trebled to reach £667,000. The workforce rose from 3,700 in 1935 to 4,500 in 1938."

Aldcroft has argued that during the inter-war period, Herbert's maintained its reputation as "one of the most progressive firms" in the industry, in terms of its methods of production and sales organisation." However, there is some evidence to suggest that the firm's founder was already becoming rather conservative in his approach to management and that this was having a marked effect on Herbert's performance in product design.

For the industry, the major technical innovation during the inter-war period was the development of tungsten carbide tooling. This new 'heavy metal' allowed cutting speeds to be increased from 75-80 feet per minute (on cast iron and steel) to 200, 400 and even 1000 feet per minute." Developed by Krupps, at Essen, Germany, tungsten carbide was quickly brought to Britain by Axel Wickman. Formerly employed as an engineer at Krupps, Wickman worked at Herbert's for a few years before setting up his own company in Coventry which started producing carbide tools in 1928. Soon afterwards, there was strong competition between Wickman Wimet and Herbert's to establish their range of carbide tools in the market."

This new tooling necessitated changes in machine tool design, in

particular the development of ball and roller bearings. The traditional bearings, white metal or babbit bearings as they were called, simply melted under the new speeds. And yet, unlike its nearest rival, Ward's of Birmingham, Herbert's continued to produce machines with babbit bearings until 1945. Bill Elliston, a Herbert service engineer from 1933 to 1941, had the opportunity to compare performances:

"During the war I was at a place in Newcastle. They were doing up the Rotel airscrew, and they'd got a big Ward 16, equivalent to the Herbert 20 Comb', brand new. Both brand new machines, side by side. The Ward was running at twice the speed on roller bearings to the Herbert on white metal. And, of course, the old Herbert white metal was trying to keep up...and seizing up by the middle of the morning. It couldn't stand up to it."

However, during the 1930s, Herbert's did re-design some machines to incorporate roller bearings, such as the 9B and the 12B combination lathes; and they were a feature of all the new designs. In the mid-1930s, Herbert's also designed the Praoptive Headstock which was, the firm claimed, a "revolutionary" configuration of sliding gears and friction clutches which allowed a smooth and rapid change in spindle speeds.²¹ But then Herbert's were relatively late in developing hydraulic- and electrical-lubrication systems. Bill Elliston, again:

"If the old man said 'Nay!', it was nay...I mean, he wouldn't even have pressure oil on the slides of the machines. They

were still the old wick and wire. We were travelling around the country putting in package pressure-oil at that time. There were no hydraulics. Everything was mechanical...Where the Americans, the Germans and these other people had got pressure oil and automatic lubrication, Herbert's were still sticking to the wick and wire...It went out with carriage lamps."*

There is no evidence that this erratic performance on product design had any serious impact on Herbert's sales in general: the 'sins' of technological conservatism did not catch up with Herbert's until thirty years later. For the moment, Herbert's remained foremost among the three firms which together controlled 80% of the UK production of automatic and semi-automatic lathes.*

The benefits of 'obsolete' forms of industrial organisation

An additional criticism of Aldcroft's account of Herbert's concerns the way he contrasts the firm's performance, and that of other leading firms, with the industry's small employers. In an unflattering account of the British machine tool industry during the inter-war period, Aldcroft directs his main attack on the small firms. To his mind, they had failed to adopt the 'best practice' of the larger enterprises because of an irrational will to keep the business firmly in the hands of "family cliques" and

spurn the economies of scale offered by working within an association of companies, such as the ABMTM. Aldcroft asserts that, in some way, these small firms were "a burden to the new dynamic sector of the industry".⁴⁴

An alternative perspective on the relationship between small and large firms is suggested in Dobb's study of the inter-war economy. He noticed that alongside the trend towards concentration of production there was the marked persistence of the small firm. Dobb argued that this was the result of cartel arrangements between the small and large firms. The latter organised the former and co-ordinated their marketing policies. Also, in times of peak demand, the small firms served as sub-contractors to the larger companies.⁴⁵ It is easy to see how this insight could be applied to the machine tool industry in general. Given the notorious "feast-famine" character of demand, larger machine tool firms would have had particularly strong reasons for ensuring the survival of apparently 'obsolete' forms of industrial organisation and technique.

Just how far Dobb's analysis offers insight into Herbert's continuing 'success story' cannot be explored here, but it is relevant to note the centrality of factoring in Herbert's activities. Saul's research shows that by 1914 a substantial part of the company's turnover was obtained through factoring arrangements.⁴⁶ It is also known that, in addition to acting as agents for several, prominent American firms, Herbert's sold the

products of a large number of small, British firms."² Lastly, it has been said that Alfred Herbert himself, founder member and first president of the Machine Tools Trades Association, was largely responsible for ensuring that the Association - unlike its sister organisations in America and Germany - incorporated agents as well as builders of machine tools."³

Conclusion:

This chapter has looked at Herbert's entrepreneurial policies from the heroic phase of the company's early years to its period of consolidation in the inter-war years. By challenging the conventional wisdom on Herbert's early "outstanding" achievements, I have tried to show that they were merely human in two major respects. First, like a number of British machine tool firms, Herbert's was a beneficiary of the wave of new technology that swept through the light engineering industries at that time. Second, Herbert's growth outstripped its rivals because it was placed in a major centre of cycle and then motor production (which generated considerable demand for the new 'automatic' machinery) and was able to exploit some exceptionally useful family ties in those same industries. As Williamson, an historian of another local firm, would have put it, there were 'wheels within wheels'.⁴ The second part of this chapter also questioned the claim that Herbert's remained "one of the most progressive firms" in the inter-war machine tool industry. It was suggested

that Herbert's may have sustained some small firms, despite their "obsolete" nature, to diversify its markets and provide a buffer from the cyclical character of demand. The chapter also used primary sources to highlight the firm's very patchy performance on product design. Herbert's period of consolidation was one in which ominous signs of managerial conservatism were already evident. These findings provide the background to the subject of the next chapter: an examination of key features of workplace politics at Herbert's before the emergence of the shop stewards' organisation.

Chapter Three: Endnotes and References.

1. S.B. Saul, "The Machine Tool Industry in Britain to 1914", *Business History*, vol.10 no.1 (1968), p. 31.
2. Roderick Floud, *The British Machine-Tool Industry, 1850-1914* (Cambridge: CUP, 1976), p. 53.
3. Saul, "The Machine Tool Industry", p. 31.
4. Idem, "The American Impact upon British Industry", *Business History*, vol.3 no.1 (1960), p. 25.
5. "About Ourselves", *Alfred Herbert News*, March/April 1952, p. 20.
6. Ibid.
7. Saul, "The American Impact", p. 25.
8. Idem, "The Machine Tool Industry", p. 42.
9. Ibid., pp. 31, 33.
10. Floud, *The British Machine-Tool Industry*, p. 53.
11. Ibid., p. 74.
12. Ibid., p. 46.
13. Ibid., p. 45.
14. John McGrath Davies, "A Twentieth Century Paternalist: Alfred Herbert and the Skilled Coventry Workman", in *Life and Labour in a Twentieth Century City: The Experience of Coventry*, (eds.) Bill Lancaster and Tony Mason (Coventry: Cryfield Press, n.d.), p. 103.
15. Floud, *The British Machine-Tool Industry*, p. 49.

16. Andrew L. Friedman, *Industry and Labour: Class Struggle at Work and Monopoly Capitalism* (London: MacMillan, 1977), p. 191.
17. Saul, "The Market and the Development of the Mechanical Engineering Industries in Britain, 1860-1914", in *Essays in Business History*, (ed.) B. Supple (Oxford: Clarendon Press, 1977) p. 163.
18. Saul, "The Machine Tool Industry", p. 35.
19. Floud, *The British Machine-Tool Industry*, pp. 54-7.
20. Ibid.. In this context, Floud counterposed the 'American system' of machine tool production, as one in which standard, multi-purpose machines were built for a range of potential customers who would then have to adapt the machine to their specific requirements. However, Floud also argued that the differences between the American and British systems were probably overdrawn and suggested there was, at any event, a convergence of techniques by 1914.
21. Friedman, *Industry and Labour*, p. 191.
22. Ibid..
23. *Alfred Herbert News*, pp. 21-2.
24. Ibid..
25. Saul, "The American Impact", p. 22.
26. American Machinist (eds.), *Metalworking: Yesterday and Today* (New York: McGraw-Hill, 1978), p. 51.
27. Saul, "The Machine Tool Industry", p. 33.
28. *Alfred Herbert News*, p. 22.
29. Friedman, *Industry and Labour*, pp. 191, 289.

30. Alfred Herbert News, p. 22.
31. Floud, *The British Machine-Tool Industry*, p. 43.
32. Saul, "The American Impact", p. 25.
33. Idem, "The Machine Tool Industry", p. 31.
34. Davies, "A Twentieth Century Paternalist", p. 101.
35. Idem, pp. 101-3.
36. Kenneth Richardson, *Twentieth Century Coventry* (Coventry: City of Coventry, 1972), p. 34.
37. Floud, *The British Machine-Tool Industry*, pp. 46-7.
38. Alfred Herbert News, p. 20.
39. Saul, "The Machine Tool Industry", p. 32.
40. The importance of family connections in the creation and rise of firms is a subject explored in some detail in a study of the local Starley company. See Geoffrey Williamson, *Wheels Within Wheels: The Story of The Starleys of Coventry* (London: Bles, 1966).
41. Alfred Herbert Limited, "Company History of AH Ltd", an undated mimeograph.
42. Figures extracted from records of the company accounts deposited at the City Records Office, Coventry.
43. Edmund P. Learned, Francis J. Aguilar, and Robert C.K. Valtz, *European Problems in General Management* (Homewood, Ill.: Richard D. Irwin Inc. for IMRDE Management Development Institute, 1963), p. 30.
44. Company accounts, City Records Office.
45. David H. Aldcroft, "The Performance of the British Machine-Tool Industry in the Interwar Years", in *British*

- Industry Between the Wars, (eds.) N.K. Buxton and David H. Aldcroft, (London: Scolar Press, 1979), pp. 285-6.
46. Ibid.; Maurice Dobb, *Studies in the Development of Capitalism* (London: Routledge and Kegan Paul, 1963), pp. 339-46. For accounts of the rise of the new engineering industries in these regions during the inter-war years see: Eric J. Hobsbawm, *Industry and Empire* (London: Weidenfeld and Nicolson, 1968), pp. 185-6; G.C. Allen, *The Structure of Industry in Britain* (London: Longmans, 1961), pp. 15-16.
47. See Mureen Branson and Margot Heinemann, *Britain in the Nineteen Thirties* (St. Albans: Panther, 1973), ch. 5; Hobsbawm, *Industry and Empire*, p. 184.
48. *Alfred Herbert News*, p. 20.
49. Alfred Herbert Limited, "Company History".
50. Fred Lynes, interview held on 15 July 1982.
51. Phil Banks-Price, interviewed on 8 June 1982.
52. Company accounts, City Records Office.
53. Aldcroft, "Interwar Years", p. 285.
54. Banks-Price, interview.
55. Richardson, *Twentieth Century Coventry*, pp. 65, 71.
56. Learned et al, *European Problems*, p. 30.
57. Aldcroft, "Interwar Years", p. 295.
58. "Herbert Machines, 1900-1950", *Alfred Herbert News*, March/April 1951, p. 25.
59. Bill Oliver, former machinist at Wickman Wimet, transcript of interview with Stephen Tolliday.
60. Bill Elliston, interview held on 12 June 1982.

61. Alfred Herbert News, p. 25.
62. Bill Elliston, interview.
63. Aldcroft, "Interwar Years", p. 292.
64. Ibid., p. 296.
65. Dobb, *Development of Capitalism*, pp. 341-8.
66. Saul, "The Machine Tool Industry", p. 32.
67. A point that emerged in the interviews with former Herbert staff and line managers.
68. Keith Gibbard, University of Manchester, undertaking doctoral research on state intervention in the British machine tool industry, interviewed on 29 November 1978.
69. Williamson, *Wheels Within Wheels*.

CHAPTER FOUR: WORKPLACE POLITICS AT HERBERT'S BEFORE THE
EMERGENCE OF THE SHOP STEWARDS' ORGANISATION.

Introduction

The previous chapter described the rise of Herbert's from a tiny jobbing shop of less than 20 workers in 1889 to a factory which, some 40 years later, had over two thousand employees. That 'success story' for Herbert the entrepreneur now provides the background to an enquiry into three key aspects of the firm's workplace politics before the emergence or rather, as I shall explain later, the re-emergence of the shop stewards' organisation, namely: youth labour, the gang system and employer paternalism.

I have chosen to approach these related topics principally through the personal recollections of a small number of men and women who were young workers at Herbert's during those years. Initially, this choice was based on obvious methodological considerations - it was in C. Wright Mills' terms a neat exercise and, on some questions, the only way of collecting data - but during the research process it became evident how fortuitous that choice was particularly in relation to the first topic of this chapter. For only through those interviews and correspondence did it become clear that during the inter-war period, and probably

much earlier too, young workers at Herbert's occupied a central position in the productive process. Apart from Davies' study which quotes scattered references in the ASE minutes to the "scandalous employment of boys" at Herbert's before the First World War,¹ and broader studies of employment which discuss the significance of youth labour during the inter-war period,² the standard business histories gave little indication that I would find this situation at Edgwick. Those same recollections also contradicted the present-day, popular image of Herbert's as the location of an adult, as well as a male-dominated, craft excellence.

In the first section of this chapter I will argue that the oral material suggests that Herbert's employed relatively large numbers of young women in the offices and young men in the machine and fitting shops. More importantly, it is suggested that many of these youths were part of what one former employee called a "vast apprenticeship system" which regulated an internal labour market for young workers at the firm. For besides providing the means to reproduce a skilled labour force (and managerial staff), it also generated a large and constantly shifting population of semi-skilled operatives. Additionally, Herbert's "apprenticeship system" effectively secured the loyalty of adult workers to the gang system, a form of collective piecework which, though it excluded them from any direct involvement in wage bargaining, facilitated their participation in the exploitation of youth labour.

The second part of this chapter looks at Herbert's variant of the gang system. Beginning from the point made earlier, namely that this payment system was 'very good for the rated men' as it allowed them to increase their bonus earnings at the expense of the apprentices, this section attempts to trace the origins of the gang system, how it became a 'weakened' piecework system under the pressures of the re-armament boom, and how it continued to provide substantial benefits for management. Lastly, I suggest that the gang system both generated the need for, and sustained, Herbert's variant of employer paternalism.

The final section looks at Herbert's paternalist regime and tries to develop two principal arguments. The first is that, while it shared many of the features of the employer paternalism practised in the textile mills of Victorian Lancashire, it was not as idiosyncratic as it appeared. At the turn of the century Herbert's labour management fitted into the current interest in "welfarism" and the customary response of firms that had expanded their workforce rapidly without changing the familial structure of management. The second argument offers some qualifications to Herbert's self-image and points to evidence of 'dissenting beliefs' among the firm's employees.

The Exploitation of Youth Labour

Young women at Herbert's

"I was 14 when I started. I never worked anywhere else. I worked there until I was 21, when I got married...in 1936."

Doris Digger worked in the wages office - on "punch cards and that" - until her marriage. She explained:

"In them days you had to leave when you got married. They wouldn't have married women. It was only the war that brought married women into Herbert's."

If this observation is correct, then it would follow that most of the women who performed routine, clerical labour at Herbert's during the inter-war years were young. This assumption is supported by the comments made by two other former office employees: Ruth Dyer and Joan Hughes. In March 1919, Ruth was 14 years old when she started work as a junior in the Correspondence Department. She recalled an occasion when, at the Butts works,

"Sir Alfred complained that he was falling over too many children running up and down the stairs, and it was arranged for us who had the authority to do this, to wear arm bands.

They were in pale blue velvet."

Ruth also showed the author a photograph of her former colleagues - dictaphone typists, office juniors and filing clerks - which conveys the image of a very youthful workforce.

In 1936, Joan was nearly 15 when she started work at Herbert's. Her first job was as a junior in the Planning Department. Some three years later, she became secretary to Walter Shepherd on his appointment as the firm's first Industrial Relations Officer."

Young women were employed on the shopfloor too, though precisely where is a matter of some controversy among the male respondents. Phillip Banks-Price, who became a special apprentice at Edgwick in 1926, recalls:

"There was more semi-skilled labour and, of course, there was a lot of women. They always used a lot of female labour in the Factory... (which) was built during the First World War... they used female labour then and didn't stop using it during the whole of the inter-war period... I can remember seeing, as I came out of the gate, the women coming out of the Factory."

Ron Green started work in the Factory Tool Store in 1934. He recalls:

"They had girls in our department, on 2S capstans and the bar lathes. But they were a small percentage of the workforce."

Other have insisted that female machinists were confined to semi-skilled work in the Factory. Bernard Woolly started work in the machine shop in 1933. His mates told him about the women in the Factory, "that was upstairs where they made die-heads and all the tools... And up there they reckoned there was a lot of women worked. Ah, there was. There was a lot of girls."

Not surprisingly, estimates of the numbers of "girls upstairs" varied between the respondents. However, given the size of the Factory at that time, 100 or more is a likely figure. Also, though female shopfloor workers have a shadowy presence in these male reminiscences, there is little doubt that they were marginalised in Herbert's internal labour market and exclusively confined to a ghetto of semi-skilled work.

"There were women on machines on the semi-skilled rate. They had women on milling machines, just milling the threading for the dies. They'd have a setter and that was it..."

"In the Factory there was women because they were small jobs...The operations were broken down into far simpler bits."

Young men at Herbert's

Whatever else may be said, young male workers were not a marginal phenomenon at Herbert's. Their numbers alone made them a significant feature of the labour process. Bernard Woolly, a trainee during the 1930s, remembered there were "no end of youths" at Herbert's. In his gang on the capstan section,

"There'd be about, roughly, 25 of us, and the oldest one of us was - well, we were almost the same age - was 18. All young lads. Good lads we were...The setter, to us lads he'd be a bloody old man; but he'd be...he couldn't have been more than

30 or 35."¹⁰

In addition to these trainees, Herbert's recruited large numbers of apprentices each year. Bernard Wall's estimate of "an intake of 100 apprentices a year" is generally supported by other respondents. For example, Bill Elliston recalls:

*"He had a vast apprenticeship system. He had 650 lads at any one time going through the shop...The empire was constructed on those lines and it worked extremely well."*¹¹

The figure of 650 apprentices can be compared with an estimate of 3,700 as the total number of employees in 1935.¹² But, for much of the inter-war period, apprentices must have constituted an even larger proportion of Edgwick's workforce. In the early 1930s, for example, when the number of employees was probably little more than 2000 and rated men were put on short-time - one week on, one week off - Edgwick must have appeared to be little else than "a vast apprenticeship system".¹³

As was shown in the recollections on female labour, there was also some disagreement on the distribution of this youthful workforce. Bernard Woolly, it may be recalled, said that all the machinists in his gang of capstan operators were teenagers. But Bill Elliston, a fitter-apprentice at that time, claimed the apprenticeship system worked so well because "Each gang had an equal number of apprentices and an equal number of skilled men." While Vic Brown recollected that in his fitting gang "there were

about 14 in the gang and about three lads, (or) about 12 men and 3 lads."¹⁴

One explanation for these conflicting accounts is that each is based on personal experiences and reflects the way management used the "apprenticeship system" to pursue two contradictory objectives, namely: to exploit youths in a labour process that was fragmented and de-skilled, and to reproduce a skilled workforce. Bernard Woolly's description of the capstan gang suggests that he and his work mates were employed as semi-skilled machinists, assisted by a setter, and overseen (literally, it seems) by a "non-working chargehand". Here management had clearly succeeded in that first objective:

"He had his desk at the bottom of the section. He used to stand on a box. God, he used to watch me all day long! And there was no smoking allowed then, you know. And if you used to be away for more than five minutes from your machine, he used to come and say something to you and he'd get as close as he could to you...and you'd say something and he'd say: 'You've been smoking, son, haven't you? You know you've been down the back for a quick drag.'"

References in other interviews to the presence of "non-working chargehands" elsewhere in the machine shop - usually with gangs operating automatic and semi-automatic machinery - suggests that Bernard's experiences were shared by many more young people at Edgwick.

To have kept these machines permanently 'manned' by youths, the recruitment and turnover of trainees must have been considerable. During this period, Herbert's would have experienced no difficulties in recruiting hundreds of school-leavers and young workers by self-referral, and I would suggest that it is significant that none of the three former trainees whom I interviewed - Tom, Bernard and Ron - had any relatives at Herbert's. Of course, I could not claim this to be a statistically significant sample of the many hundreds of youths who worked, briefly, at Herbert's; but it seems reasonable to believe that the vast majority of the trainees shared their lack of family connections at the firm. For that absence made it easier for management to treat them as low-paid temporary workers. (Until recently, their modern equivalent would have been the trainees on the Youth Training Scheme, a form of vocational training described as excellent 'for somebody else's child'.)

My remarks on turnover are possibly more speculative. During the 1920s and earlier, when few jobs were available elsewhere, it is likely that front-line management summarily dismissed many young workers for minor infringements of discipline. But by the mid-1930s, it is possible that the turnover largely resulted from the young workers' own quest for change. Bernard, for example, had already had a change of jobs - having spent a few months at Daimler, first as an errand boy then a tub grinder - before moving to Herbert's and reaching his fifteenth birthday. He left

three years later.

"Now why did I leave Herbert's? It wasn't for better money.

Well, when you're that age you don't care a lot. I just happened to leave. I don't know why. Perhaps I needed a change. So I went to Singer."

After three months, Bernard went to Siddely, then Morris Engines, then Dunlop, then Riley, and finally arrived back at Daimler in June 1940. Apart from this wanderlust of youth, many trainees must have left as a result of some "encouragement" from management such as their exclusion from the rewards granted to a few like Tom Batchelor and Ron Green.

In 1932, Tom was 16 years old and "a bit too old to be an apprentice" when he started at Herbert's. Nonetheless, he claimed to have "learned all aspects of grinding" and became a rated man by the age of 21.²⁶ Also in 1932, Ron was taken on as a trainee in the Factory Tool Store. Six months later he became a rated man. Unfortunately, I do not know what his age was at the time; but even on the assumption that he was about 20, that would still have been a remarkable achievement. Ron's own explanation, that he had a "natural aptitude" for the work, could only be part of the story. His experience - and Tom's to a certain extent - suggests that management enjoyed considerable discretion in the way it employed trainees: it could put them together into gangs of semi-skilled machinists or, if they demonstrated exceptional abilities, treat them as non-indentured apprentices.

I would suggest that, unlike the trainees, the vast majority of Herbert's craft apprentices were recruited through adult, male relatives at the firm. Bill Elliston's son, John, described it as "a sort of tradition that was handed down".²⁸ It did not guarantee a place to every school-leaver who had family connections at Herbert's - Vic Brown was one who had to work a year elsewhere (Sterling Metals, in fact) before starting his apprenticeship at Edgwick in 1930 - but it helped. As Vic put it:

"(Herbert's) was the cream of the place...and if your father worked there, that was always a lever, you know."

The implication behind this observation is that local school-leavers were confronted by a dual labour market. The prevalence of 'lads of dads' recruitment during the inter-war period is clearly asserted in Croucher's account of the apprentices' strikes in 1937;²⁹ and the race relations literature provides ample evidence of the continuing influence of family recruitment in determining job opportunities for school-leavers.³⁰ The reasons why both management and workers supported this system have been explored by other writers. Here it will suffice to make a few comments.

In addition to reducing the administrative costs of recruitment and selection, family recruitment was attractive to management because it increased its employees' dependence on the firm's continued prosperity. This comes through in the oral material, in the repeated association of 'family' with 'loyalty' to the

company. For example, after my interview with Bill Elliston, his son (also a former Herbert employee) said:

"Father mentioned that during the 'forties, 'fifties, the family worked at Herbert's. That didn't apply just to the Elliston family. It applied to many, many people at Herbert's. It was a sort of tradition that was handed down. And you had this marvellous spirit of loyalty to Alfred Herbert's."

For Herbert's employees, the system offered a chance of perpetuating shopfloor customs and practices built up over the years, of retaining the opaqueness, the 'mystery' of their trade, and maintaining a collective loyalty against management's efforts to fragment and intensify work. Equally, if not more important, it offered each man a small way of reducing the risk of unemployment and increasing the opportunity of gaining long-term job security for members of his family.

At first sight, it is obvious why there was increased competition for craft apprenticeships at Herbert's. In contrast to the uncertain character of traineeships, the experiences of Ernie Digger, Bill Elliston and Vic Brown suggest that, if job security was not exactly guaranteed, craft apprentices in the fitting shop could depend on the quality of their training. Of course, as Ernie put it, it was very much "a working apprenticeship": they were not given any formal instruction away from the shopfloor, but were expected to acquire the skills of their trade by working alongside rated men on their section. It was also a "working

apprenticeship" in the sense that, from their first day at work, they were put on piecework and expected to make a contribution to the gang's earnings. But all these men moved through the shop and acquired a range of mechanical skills before becoming machine tool fitters at the age of 21. However, even for craft apprentices, things were not as solid and reliable as they seemed. For example, it is known that some youths were transferred to the Drawing Office in the final year of their apprenticeship and subsequently moved into technical posts.¹⁹ Alternatively, some spent most of their time on a small range of semi-skilled operations.²⁰ It seemed that the quality of training depended on a variety of factors: the strength of the youth's family connections with the firm; his aptitude for the work; and, as one apprentice learned twenty years later, a certain degree of self-assertion:

'So I go to the foreman, Tom Lawrence, old sod of the old school...

'Mr Lawrence?'

'Yes, laddie...' You hadn't got a name, see.

'I want to move.'

'You again? I've seen you twice in three years!...' Always had a sense of humour. 'Why?'

'Well, I'm 18 and I can't scrape.'

'Ah, OK, leave it with me.'

Well, months go by; nothing happens until you go back... Knock, knock.

'Mr Lawrence?' He knows what you've come for.

'What now?'

'Three months have gone by and I can't scrape.'

'Monday, I'll give you a move.' Takes you round to an old chargehand, called Jack Barnesley...What do they do? You're still a bit green. You know what Tom Lawrence said?

'John, I've got a little lad here from Bedworth wants to know how to scrape.' And a little look they'd exchange with each other, and off he'd go."²¹

Lastly, within Herbert's "vast apprenticeship system" there was an elite of premium and special apprentices. These youths were articulated to a specific trade, but, unlike craft apprentices, they were assured of acquiring a familiarity with a range of manual skills before moving into the Drawing Office. They also had the chance to go to 'half-day Tech'. Obviously, they were groomed for posts in technical and managerial work; and yet their's was still a 'working apprenticeship', as Bernard Wall recalls:

"When I started there you were put on a machine, next to a qualified operator. That skilled man set up the first job...and you did that batch of work...The next job you had to set up yourself, with the skilled man looking after you. And then, if you could do that successfully, from then on you had to set yourself up...We were setting machines when we were 15 years of age."

Fred Lynes claimed that he was put on gang piecework, even though he was a special apprentice."²² Bernard Wall said he had a similar

experience:

"Oh, yes! You had a piecework price on the job, and you were expected to make it pay and contribute to the gang bonus. You were on piecework from the word 'go'."

But Banks-Price, a premium apprentice, disagreed:

"Now I worked on a daywork system. All the apprentices did in those days...(though) I think you could, if you wanted to, go on a piecework system. But I think, by and large, that apprentices were like myself: they were only passing through."

The explanation for this conflict of evidence may be that Phillip generalised - wrongly, I believe - from his own experiences. For he had started his apprenticeship in the patternshop where the dayrate was the norm.

The size of this elite of special and premium apprentices is uncertain. One estimate, offered by Ernie Digger, was of 50 each year. However, the oral evidence indicates there were several routes of entry, though the importance of family network was stressed by most respondents. For example, Bernard Wall's parents were supposed to pay a premium of some £200 for his training but, because Bernard's father was then the foreman in Gear Cutting, it came 'free'. It was "one of the perks of the job". And the testimony of another special apprentice, Phillip, suggests that men at every level of line management, including the works manager, availed themselves of that privilege. Phillip, however, had no family ties with the firm. He recalled that he did not pay the premium because he had passed an entrance examination "which

previously had only been taken by Bablake boys". (He did not explain why this test was opened out to 'non-Bablake' boys by 1926. Perhaps it was a reflection of a declining interest in mechanical engineering among middle class youth.)

There were, then, significant differences between young people in their experience of labour on the shopfloor at Edgwick - differences which were, I have argued, essentially a product of management's conflicting objectives. But equally important are those experiences of work which those young people shared.

Toilet facilities at Edgwick were primitive. The lavatories at the back of the main shop were "like a cowshed",²² unlit and exposed to the elements. It is not clear whether there were 'proper' washbasins, but most remember washing their hands in buckets placed near each gang. And Ernie Digger claimed this was an improvement on previous conditions:

"We started using buckets after we'd complained a bit about washing our hands in the paraffin tank and oil. We used to use machine oil and then go and wash in the dirty paraffin tank...and we used some dirty cotton waste...to wipe our hands."

For all young workers at Herbert's, it must have been a long working day. From most accounts it seems that in the inter-war period, the working hours were: 8.0am to 12.30pm, and 1.30pm to 5.30pm. After 30 minutes, most workers were obliged to work

another two hours overtime - though this is a matter of some dispute among the respondents. Fred Lynes, for example, recalls that in his first days as a special apprentice in 1917 he worked a 54 hour week. He continued to work these hours "till they found out" that apprentices were not supposed to be on systematic overtime. (The phrase "till they found out" is something to keep in mind when I discuss later trade unionism at Herbert's.) But Bill Elliston, a craft apprentice in the fitting shop during the 1930s, remembers the imposition of systematic overtime:

"It was eight in the morning until eight at night, and Saturday morning until twelve. If you wanted a night off - generally a Wednesday - you had to get permission off the foreman. That was when you were an apprentice."

Bernard Woolly and Tom Batchelor, both trainees in the machine shop during the 1930s, also claimed they were obliged to do systematic overtime.

With these long hours, discipline was strict. Ron Green remembers this reaction to a summons to the foreman's office one day:

"I said (to myself), 'It's the sack!' Because at that time they were so strict, you see. the foremen used to stand behind girders. They hid behind girders to catch you out."

Fortunately, Ron's fears proved unfounded; but on another occasion he witnessed a summary dismissal when a foreman saw a machinist throwing a handful of swarf and suds at another worker. The foremen could also demonstrate their authority over late arrivals:

"Dead on 8 o'clock they'd shut the gates...and if the foreman wanted you, you'd go in. If he didn't, you'd go home."

But in most instances, discipline was imposed by the chargehands. This idea is supported by Bernard Woolly's reminiscences quoted earlier in this chapter. It is also supported by Ernie Digger's recollection of the 'funny' ways of another chargehand:

"They had us on the bench with little jobs on the vice, and Arthur Gardner'd say: 'First one to finish that gets a bar of chocolate.' And when you went to ask for the bar of chocolate, he'd kick you behind or clout your ear. That was so-called fun; but your ear used to be damned red and tingling."

For those apprentices and trainees who had to work alongside adults on gang piecework, the payment system encouraged a wider interest in discipline. As Ernie put it:

"If you didn't get on with the job, the chargehand would get onto you or the chaps would get onto you."

For, as Fred Lynes explained, Herbert's variant of gang piecework ensured that the apprentices contributed rather more to the gang bonus than they received:

"Of course, it was a good system in a way for the rated men if they'd got any apprentices. They weren't earning much money - I started at 6/9 each week for 54 hours...(and) by the time, say, the last two years, they were quite as competent as plenty of the rated men; but they weren't earning anything like as much money. In other words, if they were doing a job which was worth £5, it pulled in £5 for the gang, but they

(the apprentices) didn't get the bonus on £5...The apprentice only got a 100% of whatever he was earning. If the gang got 100%, I got 6/9, you see."

Thus the gang system gave the men - both rated and semi-skilled - a direct stake in the perpetuation of the youth's low pay. And it was low pay. In October 1936, the average hourly earnings of skilled fitters in Coventry were just under 2/-.*⁴ But when Fred Lynes started his craft apprenticeship in 1917, his weekly wage for 48 hours (and sometimes more) was 6/9. In 1925, Ernie Digger started his craft apprenticeship on "6/- a week plus 3/- war bonus, which was a cost of living bonus, and a monthly bonus if you had any". Nine years later, Bernard Wall started on a wage of 7/-. In his indenture papers, it stated that he could expect to receive 8/- per week in the second year; 9/- in the third; 13/- in the fourth; and so on up to his 21st birthday. Vic Brown, who started his apprenticeship at the same time as Bernard (1934) recalls:

"You didn't get much bonus. I think I used to get 18/- a month. I got 8/9 (each week) till I was sixteen, then it went up to 11/6, then it went up to 15/8...and I forget what the other was, but I remember they were low."

But Bernard Woolly apparently did rather better as a trainee on the capstan gang in 1933:

"I was on about 12/6 a week for three weeks. Now, on the fourth week, instead of picking up 12/6, you'd pick up between £3 and £3.10.0. that was good money then for a kid, you know

what I mean? But, God, you worked for it!"

In March 1919, Ruth Dyer earned 11/9 when she started work as a junior in the Correspondence Department. In her letter to the author she wrote:

"No overtime was paid in those days; but tea was provided in lieu of."

When she was transferred to the Postal and Filing Department, she was content to accept the same conditions:

"In those days we knew it to be part of our job and we were quite happy to stay however late it was to see the job through."

When Joan Hughes took up her job at Herbert's in 1936, she earned 10/- a week plus a monthly production bonus. Her basic rate rose in annual increments of half-a-crown.

These stories about the low rates of pay, the strict discipline and the long hours of work at Herbert's would fit neatly into Croucher's grim evocation of labour there. And yet, among the respondents, only Tom looked back on those days as "terrible" and "diabolical really". For the others, they were, as Ruth put it, "HAPPY DAYS":

"It was a very good firm to work for before the war.""

"They were the happiest days of my life.""

"I was a lad at the time, and I enjoyed it there.""

There are several explanations for this paradox. Although few of the people interviewed had experienced unemployment before going to Herbert's - most had moved straight on from school without any apparent difficulty - the fear of unemployment is hinted at in several accounts. For example, Vic Brown recalls that when he got a job at Herbert's in 1930 "the blokes in the street used to say, 'You lucky devil!' 'Cause it was a busy place then, you see, and it was recognised for full-time working." So a job, almost any job, was welcomed. Similarly, while it was acknowledged that the basic rates were low, most people would have agreed with Harry Earle's observation:

"Well, you know, it was a good place to work. You were in constant employment - which was something in those days. The car industry in those days was six months on, six months off.""

A few argued that the pay differential - between Herbert's and the other, major firms - was marginal, anyway:

"'Course, Herbert's weren't noted for paying top money...But they always used to say that provided you were a competent worker and you didn't break into the safe, you'd got a job for life. And some people valued that more than perhaps an extra 10/- working in a car factory.""

And one respondent, Ron Green, claimed that earnings at Herbert's

were, for a time, competitive with the best offered elsewhere as output at Edgwick rose sharply in the late 1930s:

"I was on about £9.10.0 a week, which was very good because most (outside Herbert's) were on £4 or £5 a week - which is what I'd said to you over the 'phone. Before the war, people at Herbert's were earning good money."

Toilet facilities were deplorable, but also unexceptional for a large engineering firm at that time. As Ernie Digger put it: "Oh, it was no mod con. We were there to work." However, for its time, Edgwick offered exceptionally good canteen and recreational amenities. Bernard Woolly again:

"They had a good canteen, though, I'll give them that. They had good sports facilities as well...In the summer, we used to play bowls...(and) they had a good library."

The main shop itself was, by all accounts, thoroughly clean. And the routine of cleaning down the machines on a Saturday morning, described by Vic Brown, appears to have created a sense of pride in working at the factory:

"Every Saturday morning at 11 o'clock, the kids on the gang got handbrushes. They put up all the hammers, all the files, hacksaws, drills, everything; swept all the bench and put up everything. And the chargehand would come round and look at them. And then, before you knocked off, the foreman used to go all the way around and look. And everything was beautiful and clean. Lovely. You could eat your meal off the floor. It was

always nice, though, Herbert's, I thought."

If the managers tried to inculcate a sense of pride through cleanliness of the machines - not the workers, of course - they were also concerned to stress the virtues of quality in Herbert workmanship. Probably the best illustration of this point is the tale about the day when the works director, Oscar Harmer, put a machine under the hammer. Whether fact or fable, it has entered into Herbert lore.³⁰ This is how Phil Barnes related it to the author:

"There was a machine waiting to be delivered to a customer...and on the foot casting there was some sort of blow-hole - not a serious thing in itself, it wouldn't have affected the machine, not in five minutes...So, what to do about it? Eventually, Mr Harmer came by...and he said: 'That isn't a Herbert casting, is it?...he said, 'You know what to do with it, don't you?' They knew they'd got to change the casting, re-build the machine, strip it down, re-build...and test it all over again - and the customer was waiting for this machine."

After Harmer had left the shop, the foremen thought better of it: the hole was plugged and then re-painted. But, sometime later, when the machine was loaded on a horse and dray and being taken out of the works, Mr Harmer re-appeared on the scene. He halted the dray to a halt and re-examined the machine. Phil continues the story;

"Is that the machine we were talking about?' Yes, they had to admit it was...(then Harmer) said: 'Ask Stringer to come here, will you?' - Stringer was a blacksmith - 'and ask him to bring his sledge hammer with him'... (When Stringer arrived, Harmer) took the sledge hammer and put it across the machine, a brand new machine, and he smashed the bed...frightened the life out of everybody...then he gave the hammer back to Stringer and said: 'That machine won't go out now, will it?'"

In part, Barnes' tale is a message about the irrational display of managerial power, the autocracy of the factory boss during those days. It is also a message about the superior quality of the Herbert product. Not surprisingly, this message was often reinforced through the house journal. Here is one example:

"Who doubts the individual artistry of the engineer.

If it were not so how then could he create a machine?

"Will man ultimately reach a climax to his creative ability...

"The world demands that it should be so. The machine tool puts its demands into action.

"Herbert No22. Massive. Prodigious. Impassive.

Unparalleled. A work of art. Yes, truly a work of art.

The artist? The A.H.engineer."21

Linked with the practice and ideology of quality, there was also the matter of safety at work. In the interviews, the claim is made repeatedly that Alfred Herbert was a pioneer in this regard:

*"He was one of the first, the earliest people to have a full-time safety engineer. He was a man who didn't care to take risks himself, and he wouldn't have other people taking risks."*²²

Not surprisingly, safety can become entangled with the issue of discipline, as Vic Brown found in his brush with 'Mr Coles':

"And I (will) always remember one day. I was polishing a shaft up and I was looking around...He said: 'What are you doing, young man?' So he called all the apprentices around, maybe half a dozen, and he said: 'Ah, he's polishing a shaft. Now show 'em how you polish it!' Then he said: 'You wasn't doing it like that, you was bloody doing like this!' And he went and told the chargehand off, and I got it off him...I was in tears nearly, you know. I was frightened to death."

Perhaps memories of incidents like this are reflected in the statement frequently voiced in the interviews, that discipline was "hard but fair".²³ The general impression which emerges from these interviews is that, as a major engineering firm in Coventry, Herbert's was no worse than the others, and probably considerably better than most. I would suggest that there is one other reason for all the fond recollections of those "happy

days". Bernard Woolly expressed it in this way:

"Well, you're a young lad yourself, and you wouldn't understand...I mean, as you get older, it doesn't matter how bad times were in your younger days, you had a good time..."

As youths they could enjoy a growing sense of independence from their parents without acquiring any parental responsibilities of their own. Shifting between the adult world and that of the child, they had a licence to indulge in practical jokes - sometimes with near-fatal consequence - without risking dismissal. Ernie Digger, for example, recalls an occasion when he and other apprentices overturned a fully-laden coal barge at the works. For that offence they were suspended from work for one day. The apprentices could also enjoy the routine events which subverted managerial authority. Bill Elliston recalls:

"The men used to have a drink of tea, but it was very clandestine. And, as an apprentice, I used to have to take 20 tea cans on a big run down to the foundry and open the foundry and boil the tea, you know...And then you had to dodge the watchman who was patrolling the gangways, and carry it back to the men."

These reminiscences suggest that the young men did not passively consent to the harsher realities of their 'apprenticeship' at Herbert's. It was a kind of compliance or accommodation in which they enjoyed some immediate benefits and anticipated others (such as the acquisition of marketable skills). Furthermore, that

acommodation did not prevent them from participating in a factory sub-culture in which workers collectively and routinely subverted managerial authority. It is not surprising, then, that when the re-armament boom changed the industrial climate and encouraged trade unionists at Herbert's to rebuild a stewards' organisation that had been dormant since the Engineers Lock-Out of 1922, it was precisely these young men who took the lead in openly challenging their employer by taking part in the wave of apprentices' strikes which swept through the local factories in September 1937; though explaining this in detail would be another story. Now, it is time to move on to a discussion of the second topic of this chapter: the gang system.

The Gang System at Herbert's in the Inter-War Years

Earlier, I indicated a direct link between the "vast apprenticeship system" and gang piecework. As Fred Lynes put it: "it was a very good system in a way for the rated men if they'd got any apprentices". Through the oral accounts used earlier, it is possible to form an impression of the spread of Herbert's variant of gang piecework across the plant, its history and its politics.

During the inter-war period, management ran several, distinctly different payment systems at Edgwick. The clearest statement on this, and on the location of gang piecework at the plant, is

provided by Phillip Banks-Price who, you may recall, began his apprenticeship in the patternshop in 1926:

"...where I started...there was no piecework at all. It was all daywork. The foundry was a bit of a mixture of piecework and daywork - chiefly piecework, individual piecework - there was no gang piecework. Then the machine shop and the fitting shop was all on gang piecework..."

However, the origins of Herbert's gang system can only be guessed at from the fragments of information at hand. Fred Lynes' recollections suggest Herberts operated such a system at the Butts as early as 1917. Davies' research found evidence to indicate it existed in 1899 and possibly earlier. Unfortunately, these chronologies fit neither of the studies of local labour history written by Croucher.²⁴ From his research, Croucher concluded that gang piecework was first introduced in Coventry at Standard's Canley plant in 1922. Other local engineering firms, he claimed, adopted this system a few years later.²⁵ Friedman, however, found "a nascent gang system" at another local firm, Daimler, during the First World War. Attempts to re-impose individual piecework immediately after the war failed and a three month long 'go-slow' by 6000 workers eventually forced management to formally recognise the system in 1919.²⁶

One possible explanation for the wide divergence between the evidence on Herbert's and the chronologies suggested by the two local studies is that Herbert's gang system may have been a form

of internal sub-contract. But this explanation is extremely unlikely. By the 1890s, when the firm's expansion began, internal contracting was in decline, particularly in the engineering industries. As Littler put it: *"new ideas, new methods, and new technology influenced many employers to reach down for more control over the shopfloor."* Part of that push for workshop re-organisation involved the introduction of piecework payment systems which Littler described as *"a widespread attempt to extend petty capitalist motives to all workers"*. *"Thus,"* he wrote, *"the decay of contract systems was associated with the spread of collective and individual piecework."* Given the earlier account of Herbert's emulation of 'American techniques', it would seem reasonable to assume that his payment system was a form of collective piecework.³⁷

If this assumption is correct, then alternative explanations of these divergent claims have to be sought. I would suggest that both Croucher and Friedman simply got the chronology wrong, though for different reasons. Because it was marginal to his thesis, Croucher probably relied on some inadequate secondary sources such as Pollard and Richardson.³⁸ In Friedman's case, I would suggest that the error may be due to a romantic misconception of the politics of the gang system. He saw it as the product of worker-resistance, or at least, a reflection of their *"strong position"* in shopfloor politics. For though it could also provide solutions to *"top managers' technical predicaments"*, as he put it, clearly workers had most to gain

from a system which -

"...increased workers' direct control over productive activity, increased their job security, increased their security against other forms of disciplinary action and improved their working relations with each other."³⁰

This orientation led Friedman to make the comment that, after 1945, the gang system was "most widespread at Standard Motors" which, "as a result...became better known for high wages, more pleasant working conditions and faster work pace." In a footnote, Friedman made a minor qualification to this argument.

Occasionally, he observed, gangsters transferred their loyalties and became, in Drayton's words, "Gaffers' men". But in this unhappy circumstance, the men sometimes responded by electing 'gang stewards' who, presumably, kept the gangsters in check.⁴⁰

In contrast to this celebratory account of gang piecework, Croucher argued that whether or not the system operated to workers' advantage depended on the politics of each factory. In particular, he claimed that while Herbert's, Armstrong & Whitworth, and Standard were alike in that, among local employers, they made the most extensive use of gang piecework, at Herberts "the system was at its worst, from the workers' point of view." During his research, Croucher interviewed old workers who could remember "being sworn at, threatened with the sack and even struck by gangsters trying to extract more production."⁴² While my oral material suggests Croucher over-painted the scene, it is

clear that the gangers, or chargehands in this case, were very much "Gaffers' men" at Herbert's:

"The king pin at Herbert's was the chargehand - before we went on to individual piecework - and he ran the place."**

"...the chargehands were very strong, very strong indeed. They were the strongest element in the whole of the management."**

"Now the chargehands in the gang system were controlling their own interests. He took over everybody under him. If they didn't toe the line, they were out. He'd go to the foreman and say, 'I don't want him.' And the foreman would sack him."**

From these same interviews it is possible to construct an impression of how the gang system worked at Herbert's.

For three weeks each month, the pieceworkers received a regular payment that was made up from their base-rate - usually fixed by the national engineering talks - plus a cost of living supplement. Through personal approaches to management, individual workers could earn a base-rate that was enhanced by a discretionary award. An example of this kind of favouritism is provided by the chargehands. During the 1930s, they usually received 7/6 on top of their base-rate; but particularly favoured ones could earn considerably more than that:

"Now, when I went to see the foreman that took over from Woffie Allen, and he said he couldn't do this for me and he

couldn't do that, I said: 'Well, what about the other chaps? I know that Jim Berry is getting 66/- above the rate.'

"'He can't be', he said.

"'He is!', I said. 'I was there when Wof' Allen gave it to him.' And it was right, you see. He was a foreman; but he wasn't getting as much as Berry, and it hurt him a little.""

The total sum of these base-rates within a gang was divided by the number of workers in that gang. This average was called the gang-rate and was used to calculate piecework prices for the gang. At the end of the month, the value of the work produced and the gang-rate were compared. If the gang had earned more than their gang-rate, the difference was paid as a gang bonus. But the size of the bonus was communicated to the gang as a percentage, and not as a sum of money, as it was shared out according to the base-rate of each gang member. In practice, this meant that the chargehand took the largest share, and the apprentice the smallest. So, the monthly allocation of the gang bonus was a regular reminder to each member that there was a hierarchy within the gang which was partly a product of national pay structures and, more importantly, a product of the chargehand's own power and patronage.

At one level, it is possible to describe the theory of gang piecework prices by saying the rate-fixer priced a job by relating "average effort" to the gang-rate and the chargehands were formally excluded from the process that determined that

price. However, the reminiscences suggest that pay bargaining between the rate-fixer and the chargehand did take place.

Banks-Price recalled:

"Well, you used to find out - but it's awfully difficult to find out the truth on a thing like this, you know! They're very sore points! But I think what you could say as a general rule was that the piecework people would say: 'Well, alright Jack, I know it's a lousy job; but I'll give you a good price on this one here. You'll be alright. You'll get your usual percentage.' This was the way it went as far as I could see."

Phil Barnes, a rate-fixer from 1936 to 1958, confirmed that this process of informal negotiation did take place:

"And then, at the end of the month, the rate-fixer went down with the chargehand into a corner of the office somewhere, and he'd have all the piecework tickets that'd been issued and signed by the inspector, and he'd say: 'Was it alright at 3d a piece?'

'Yes, it was alright...a bit thin, it didn't give us much.'

'Well, why? What's the matter?'

'Well, you can't get the tools to stand up...' or something like this, you see...This was your technical stuff. Well, the rate-fixer would appreciate this point, and he also knew his man...He knew whether he was a leg-puller - which some of them tried to be...You knew who you were dealing with because you were dealing with them every day...'How much is it now? 3d a piece? Well, I'll give you 4d. How's that?'"

Bargaining over piecework prices was also influenced by the gang members' preference for stable earnings. This was tacitly recognised by both rate-fixer and chargehand as an imperative to stabilise the gang bonus.⁴² Leaving aside the allocation of work, this could only be achieved in two ways. First, the rate-fixer could offer a higher price on one job to compensate for a low price on another - in Banks-Price's words:

"Well, alright Jack, I know it's a lousy job; but I'll give you a good price on this one here. (So) You'll get your usual percentage."

The second way by which the gang could get its "usual percentage" was through a kitty. Phil Barnes explained how it worked:

"Well, you were not supposed to keep a kitty, but you did...You see, sometimes you'd have a thin week: the work wouldn't come in; it would be stuck down the end of the bay or somewhere. So it was very nice to have a pound or two in the kitty to help out...(The chargehand would) say: 'Well, we're about four or five quid light on our gang this week. We had trouble with that machine; (it) put us back a bit.'...So, you'd put in some money from the kitty. The men needn't ever know about it. Their bonus would be the same...It was their money, anyhow."

This "little bit of diplomacy between chargehand and rate-fixer" may have played havoc with the shop scheduling system, but there is no evidence that it affected piece-prices or distorted labour costs to any significant degree. The same cannot be said of the

various shop bonuses and merit payments that took an increasing share of the Edgwick's wages bill.

Banks-Price became "a sort of junior production engineer" in the Sub-Contract Department during the 1939-45 war. His explanation of the complexities involved in determining costs provides a glimpse of the way the system had developed between the wars:

"The prices we were allowed to offer were the piecework prices at Herbert's multiplied by a figure -, starting off at six, but it altered all the time. Don't forget the piecework price at Herbert's was the pre-1914 price...Then there was what we called 'war bonus'. Then the 'consolidation' something or other - that was a percentage - then there was another percentage, then another percentage this, that and the other...It really got complicated."

These "percentages", encrusted one on top of the other, were an ungainly compromise between Sir Alfred's determination to keep a tight control over labour costs - that is why the 'production engineers and rate-fixers had to start their calculations from the "pre-1914 prices" - and the growing struggle to attract and retain labour in a local economy which, from the mid-1930s, was fast becoming a 'boom town'.⁴⁷ From his vantage point, Banks-Price recognised that "one of the difficulties" linked with the payment system was that senior management "always wanted production and more production, and the only way you get more production is by more co-operation." Under these circumstances, it is easy to see how the job prices became, as he put it,

"extremely phoney". The "phoney" prices of this weakening piecework system effectively prevented management from building up a reliable costing system that could be used in negotiating with Herbert's many sub-contractors during the war. Banks-Price, again:

"I do know that there were some jobs that we just couldn't hope to get anywhere near with on the sub-contract basis. Nobody would look at the job. They'd say: 'You must be absolutely mad!'"

And Bernard Wall noted similar "trouble" at Herbert's shadow, or 'dispersal', factories:

"They found that when they moved one of the jobs from Edgwick to one of the dispersal factories, although the price was acceptable at the main works and it paid, as soon as they moved it, other people couldn't make it pay...And they was getting into trouble."

An additional difficulty with the gang system, as it operated at Herbert's, was that it seems to have encouraged some chargehands to regard themselves, and sometimes behave, as sub-contractors. This is how Bill Elliston, formerly a fitter-chargehand and now the owner of a medium-sized machine tool business, described his tasks:

"...the chargehand had control of the money, the running of the job, the payment. He paid the men. He had a lump sum off the company and, before he could make any bonus, he had to pay back the wages of his men to the company, if you get what I

mean."

I believe that this self-conception of chargehand as sub-contractor encouraged some who, like Bill, intended to become employers, to practice some of the traditional fiddles of sub-contractors - smuggling parts out to furnish their own 'backyard businesses'; failing to record work for small, local firms - before leaving Herbert's.**

However, the gang system still retained some benefits for management. In particular, it continued to ensure that, on the question of pay at least, the employer-worker relationship would be mediated through that stratum of semi-supervisory workers, the chargehands. Since the gang was excluded from the bargaining process, the only way they could measure their effort against piecework prices was through the size of the "percentage" of the gang bonus. They could compare it over time:

"You would get 100% or 75%. And, of course, our bonus started to go right down. It was 50,40,60...***

They could also compare it with the percentages earned by other gangs:

"their gangs got a higher bonus than us. We were producing about 100%, and they were on 120, 130%...***

Not unnaturally, if they came out badly in these comparisons, the gang would often put the blame on the chargehands initially. Sometimes this kind of collective pressure encouraged some to bend the rules in other ways. One chargehand, Tom Batchelor recalls, was

"that disgusted with the amount of money that his men were getting in bonus that when they had half-built the machine, he booked it...It went on and on like this until they'd got every machine on the section booked in before they'd started them - purposely to give his men a reasonable wage. And when they found out, he got the sack."

From the other side, management applied its own form of pressure to obtain more production. As you may recall, Ron Green mentioned one chargehand who, he claimed, received 66/- above the rate. He explained:

"Jim Berry had got all the automatics, you see, that did most of the work on the section. And Wof' Allen's job was to see that the output was there. So he kept the chargehands happy...Now there was a bloke...on the bar lathes, and he was well above the rate... You could always tell who the highest rated chargehands were because the foreman was always having a natter with them...Now some of the chargehands were very placid. They wouldn't say 'Booi' to a goose...and those were the sort of people who weren't on the top money, you see."

Many among the latter group of chargehands must have felt, like Ernie Digger, that their enhanced base-rate simply did not compensate for the pressure they came under from both sides:

"For that ten bob you had kicks from anything between 10 and 20 men, plus the kicks from the foreman and the manager."

Ernie's complaint raises a major qualification to Croucher's accounts of intimidation by chargehands; but it does not

contradict such evidence. Indeed, given the fact that the chargehand directly gained from an intensification of work, the payment system encouraged him to become "a bully and a sweater" to a degree that could easily become dysfunctional for management.²¹ In a survey of payment systems at the close of the nineteenth century, Schloss identified the following as the "most objectionable results" of this form of collective piecework: the threat to workers' health and safety; 'scamped' work; and, where possible, deception as to the amount of work done.²² To avoid these dangers, he suggested a reasonable precaution would be to appoint "superior officials" who were "in receipt of fixed salaries", with perhaps a bonus "contingent upon the rate of profit realised by the business".²³ In his example, these "superior officials" were inspectors. At Herbert's, I would suggest, they were foremen and the firm's large army of inspectors. It can also be argued that management's evident interest in both work safety and quality acted as powerful countervailing forces against those that encouraged the 'bullies and sweaters' among Herbert's chargehands.

If some aspects of gang piecework were dysfunctional for management, they were obviously outweighed by considerable advantages since the evidence suggests that the gang system in the 1930s was much the same as that used in the 1890s. Firstly, I would argue that it offered some of the advantages associated with internal sub-contracting: it was, effectively, a delegated mode of control which generally reduced the costs of production

control and labour administration, and provided a route for the upward mobility of key workers." Secondly, it facilitated the exploitation of youth labour. Thirdly, with the necessary safeguards, it was a system which encouraged every man to be a 'supervisor' to his colleagues," and gave the actual supervisor (the chargehand) a direct interest in increased production." Fourthly, it was technically suited to specific elements of the labour process, such as fitting, where the calculation of individual piecework would have been "special, elaborate and troublesome". Lastly, the gang system must also have been linked to management's success in keeping down labour costs without provoking serious, oppositional activity among workers until the end of the 1930s - an achievement made more remarkable by the fact that, by then, Edgwick was one of only 519 factories in Britain which employed over 1000 workers."

Some of the possible reasons for that near-absence of oppositional activity were discussed earlier: workers were divided by the hierarchies within gangs as well as between them; and tensions created by a low wage policy were frequently mediated through the chargehands. As a continuation of this last point, I would suggest that management also gained because, in the gang system, the formal and informal systems of control remained united. Using Littler's argument, I would say that the gang system prevented a "disassociation of work groups" which created "the potential for the emergence of rival work-group leadership, such as the...shop stewards." I would also suggest

that as well as discouraging the emergence of a shop steward leadership, the gang system both generated the need for and sustained Herbert's variant of employer paternalism.

Employer Paternalism at Herbert's

Littler argued that, in the closing decades of the nineteenth century, employers moved away from internal contract systems and piece-mastership and took direct control over labour management. Consequently, there were *"some signs of a turning towards paternalistic forms of organisation between 1880 and 1914."*¹⁰ While the tradition of paternalism in Britain was *"thin and spasmodic"*, Littler wrote, the Quaker employers, such as Cadbury and C & J Clark, provided a new impetus to paternalistic practices in the 1890s and 1900s. A few, such as Cadbury, built model factory villages; but in this new paternalism, there was a shift of emphasis away *"from housing and community work to a concern for factory amenities and working conditions."*¹¹

However, Littler found that this new form of paternalism, or *"welfarism"*, as it was sometimes called, only affected a small minority of firms and was confined to factories which employed large numbers of women and girls. *"Welfarism"* had a *"restricted coverage"*, particularly in engineering, partly because such proposals provoked hostility from foremen and workers alike, especially skilled workers who were *"saturated in values of*

self-help and staunchly resistant to dependent employment relationships".** Littler also argued that this new paternalism was incompatible with the consequences of the introduction of premium bonus schemes and associated workshop changes which "actually increased casualisation of labour". Paternalism, he argued, entailed increased employment stability, as well as considerable concern for the non-work life of the employee.

As I mentioned earlier, at the turn of the century, Alfred Herbert had become a major employer. In 1903, some 900 people worked at his factory on Upper York Street, and by 1914, the workforce had more than doubled to 2000. This made the Butts works easily one of the largest factories in the city. In 1907, the largest was the Rudge-Whitworth cycle factory with a workforce of 1800 employees.** Clearly, then, Herbert had the necessary capital to finance a kind of "welfarism".

There is also no evidence to suggest that there was "staunch resistance" by "self-reliant" foremen and workers. On the contrary, I suspect some employees positively welcomed a strong, paternalist management because it legitimated their own ways of imposing their authority over younger workers.

Similarly, there is no evidence that Herbert adopted management practices which led to the increased casualisation of labour, for example, through chaotic production planning. Given the fact that the company's early history was characterised by a phenomenal

growth rate, and the general view that the firm emulated the best of 'American' technique, it seems likely that from those first years Herbert could offer stable employment to a core of his employees at least. As already stated, Fred Lynes claimed that the "competent worker" had "a job for life". For a significant number of employees at Herbert's this meant work well into the age of retirement.*

On the basis of Littler's argument then, the essential conditions for "welfarism" were present at Herbert's, so it should not be surprising to find abundant evidence of its existence. Some of that material has been mentioned earlier in this chapter: Herbert's exceptional concern for safety at work; the light, clean and spacious conditions on the shopfloor; the canteen facilities and the abundance of recreational activities based at the factory's social club. However, the concept of "welfarism" does not adequately characterise Herbert's kind of paternalism. I would argue that a more relevant model is provided in Patrick Joyce's evocation of the paternalism of some of the major textile firms in Victorian Lancashire.

There was the same attempt to manage face-to-face interactions with employees without carrying the degree of identification too far, and consequently risking the legitimacy of the employer's authority. One simple device Herbert used, perhaps intuitively, "to combine the aloof with the familiar" was his habit of smoking Woodbines when he visited the shopfloor. These cigarettes

were certainly cheap; but they also signified the employer's authority as no one else could smoke for fear of instant dismissal."² Similarly, through articles in the house journal, Herbert sometimes tried to claim an affinity with his employees. On one occasion, for example, he declared rich parents to be "an absolute handicap" for ambitious, young people."³ But Davies' research suggests that these efforts failed with some workers. One respondent told him that Herbert "hardly ever spoke to the men in the shop."⁴ Instead, he appeared to be more comfortable in formal situations: attending an apprentices' prize-giving ceremony, for example, or an annual sports or departmental dinner:

*"He could make a speech, include references to the 'Herbert Spirit', make presentations, and withdraw."*⁵

Some workers also recall Herbert's acts of meanness, such as the occasion when he was approached for a donation to a works outing: "What he gave wouldn't have bought a packet of Woodbines, and they were two pence a packet."⁶ Another anecdote suggests an attitude that was perhaps more militaristic than paternalistic. This is how Ron Green related it to the author:

"He used to come down the shop in his little limousine...He used to come riding down...because the bays were wide enough."

Then, one year, just before Christmas, 'Alfie' tried to arrange an inspection without prior warning:

"But the managing director must have 'phoned up the works manager and told him that Alfie was on his way...The idea was

that when Alfie came all the foremen stood at the end of the bays - their offices used to come at the end of the bays, you see. So the foreman and his deputy would have to stand there and...you know: 'Good morning, sir.' Well, this particular morning, at the fourth office down, the foreman wasn't there. Alfie must have taken particular note of this because the next thing we heard was that this bloke had got the sack. Now that's how it was, you see...The foreman had to bow and scrape to Alf', to a certain degree. This was before the War."

When considering stories such as this, it becomes clear that there are difficulties in contrasting, as an ideal-type, the paternalistic with the military-bureaucratic mode of control on the shopfloor because there seem to be many similarities in the way generals and large employers secured the 'loyalty' of their subordinates. Military commanders often acted 'paternally'; and employers developed structures of authority which not only reflected military models, but were sometimes described by employers in military terms. For example, in Littler's book there is a quote from an employers' association that talked about foremen as NCOs.⁷² On occasions such as the dismissal of the absent foreman, Sir Alfred's conduct certainly appeared more militaristic than paternalistic.

All these anecdotes also convey a certain degree of hostility towards the founder's authority on the shopfloor. So perhaps it was fortunate that, from an early date, he had no involvement in

the day-to-day management of the factory. From the turn of the century, that task was entrusted to Oscar Harmer, a man who, in Joyce's words, could be seen by the employer "as the apostle of his moral purpose and family spirit."²

Harmer could also be autocratic, as Phil Barnes tale about the blacksmith's hammer suggests; but it seems he was far more successful than his employer in blending the aloof with the familiar. One shop manager recalled that Harmer "could swear for ten minutes without repeating himself."³ Ernie Digger remembers him as "a grand old fellow."

"When he was eighty (in 1930, KG) they rapped him all the way round, as if he was an apprentice coming out."⁴

Like the Victorian paternalists described by Joyce, Herbert also drew his family into personal contact with the operatives. His first wife, and later his daughter and son-in-law, attended numerous company functions. Lady Herbert's visits to the sick became legendary:

"any employee off ill for any length of time - from the works manager to the lowest labourer - Sir Alfred and Lady Herbert got to know about it...(and) Lady Herbert used to go around visiting the sick."⁵

After her death, the factory surgery was dedicated to the memory of this "mother of the firm", as she was called by the local press.⁶

There is also some slender evidence that Herbert provided housing for some of his operatives at Edgwick,⁷⁷ though nothing comparable to the scale of Saltaire, Ripleyville or Akroyden.⁷⁸ Herbert did not try to physically reconstitute an entire community. But Davies' research indicates that something close to a factory community, created through proximity to the works, family recruitment, the range of recreational and educational activities organised through the Alfred Herbert Institute, and Lady Herbert's involvement in the local church bazaars. He also tried, like earlier paternalists, to impress his image on the local community through 'good works': the gift of land at the Butts, Lady Herbert's Garden and Town Thorns School; donations to Coventry and Warwickshire Hospital and towards the building of the Herbert Art Gallery and Museum; and lastly, his patronage of educational awards.⁷⁹

Sir Alfred's inner motives are a matter of speculation; but it is likely that his form of paternalism was grounded in self-interest. First, as I have argued, the evident concern over safety and working conditions at the plant acted as a countervailing force against the 'sweating' tendencies of the firm's gang system. Second, like previous generations of employers,⁸⁰ Herbert probably calculated that all these acts of benevolence would be a strong antidote to trade unionism. In his writings and speeches, his views on trades unions seemed ambivalent;⁸¹ but through his actions, his employees were left in no doubt that he was "not a lover of unions".⁸² For example, in

1901 his managers purged a small number of ASE activists after a brief dispute over fines for lateness."² On another occasion, eight years later, trade unionists learnt they were barred employment in the Inspection Department."² And, in addition to these overt acts of hostility, the managers used more subtle means to harass union activists. Bill Elliston, formerly a chargehand, recalls:

"If you were seen talking to, divulging any secrets to, the union men, it was frowned on; and you had to rely on management because if you fell out with management you wouldn't get a good run of machines and they could kill you financially. So you became part of the management team, see?"

A possible third motive was financial. As Joyce has observed, paternalism could be made to pay for itself: the employer's benevolence was sustained by the long hours and low pay of its supposed beneficiaries."² It had been demonstrably successful for large, capitalist employers during the nineteenth century and,² until the inter-war period, a coherent alternative was absent in British management theory."²

You may also recall that Littler characterised the British tradition of employer paternalism as "thin and spasmodic". It can be argued that while this description is broadly true, it under-estimates the strength of that tradition among Coventry's employers until the Second World War. Shortly after his arrival in the city, Herbert would have learnt about the history of

paternalist innovations by employers such as Joseph Cash, Eli Green and A.E.Fridlander; and, among his contemporaries, he had the example of M.Bettman, J.D.Siddeley, and not least J.Black.** In addition to his measures on health and safety, in 1936 Black introduced a non-contributory pension scheme for Standard's shopfloor workers before he had even thought of doing the same for his fellow executives. (Given Herbert's deep and personal antipathy towards him, this innovation may have prodded Herbert into setting up, and then granting a large donation to, a staff pension scheme of his own.)

The inter-war period witnessed the rapid concentration of British capital. Giant conglomerates began to dominate the industrial landscape. These organisations provided the material basis for the emergence of new management theories, such as the rationalisation movement, and neo-Taylorite business consultancies of which Bedaux was the most well-known example.** But it seems that employer paternalism persisted in Coventry. I would argue that this was the product of the city's unusual circumstances. Coventry became in turn the centre of two new industries - cycle and motors - which were created by small, family businesses and based on an empirical technology. The successful firms rapidly expanded and concentration of capital took place; but the familial management structure remained intact in many companies and the traditional response to size - paternalism - seemed adequate.

In a discussion of Herbert's paternalism, especially one based on oral material, there is a danger of mistaking the myth for reality. It is doubtful, for example, that the "mother of the firm" visited all the chronically-ill employees (especially after the family's move to Hampshire in the late 1920s). And the treatment received by one apprentice, after he had been hospitalised as a result of an industrial accident, suggests something less than a 'paternal' concern by the employer's agents. Tom Batchelor recalls that when the youth returned to work he was offered money and asked to sign a paper:

"Any road, he signed this paper and they gave him his pay packet, and there was 7/6 in it, and this 7/6 was payment for him signing that to relieve the company for all responsibility for the accident. Now, he didn't know that. He didn't know until he got it home and showed the copy to his father."

Similarly, the accounts of veteran employees who "died in harness" have to be balanced with eye-witness accounts of dismissals for minor infringements of discipline, and evidence of the forced departure of many youths after completion of their training.

There is also good reason to suspect Davies' evocation of the factory community. Firstly, his account blurs over the fact that until the late-1920s, there were two factory sites some two miles apart in Coventry. Secondly, and more importantly, it takes no account of the instability of such "communities" from the turn of

the century caused by the city's phenomenal population growth" and the development of passenger transportation which transformed thousands of agricultural labourers from the surrounding districts into industrial commuters."¹ "It was the tram and the bicycle, much more than the railway," wrote Joyce, "that liberated the factory worker from the domination of the territorial. The link between home and work remained firm until these severed it."² Thirdly, local state politics in the twentieth century effectively limited Herbert's involvement in the "community". Like previous generations of employers, Herbert treasured the ambition of becoming a councillor. But if factory politics seemed unchanged, this was clearly not the case with politics outside the gates. Party politics were becoming visibly linked to a kind of class politics; and this seems to have discouraged nearly all of the large, local employers - not only Herbert - from becoming councillors, as such involvement threatened their efforts to create a class-less image of themselves."³

Lastly, and perhaps most importantly, it should not be assumed that Herbert's image of himself as 'patriarch' was reciprocated by a uniformly 'deferential' workforce. One of the more serious weaknesses of Joyce's account of employer paternalism in Victorian Lancashire is that it dwells too much on the employer's self-image and then reads from it - seeking support mainly from records of workers' public conduct before management and ambivalent electoral data - the opposite image of the

'deferential' worker without exploring the extent and depth to which factory workers shared their employer's values, as well as the intensity and range of dissenting beliefs." Leaving aside the presence of trade union activists - the subject of the next chapter - there is some evidence of 'dissenting beliefs' among other workers. Several examples have been quoted already: the complaints about the employer's austerity and meanness, and the evasion of responsibility in the case of one industrial accident. One interview suggests that sometimes Herbert's patriarchal image was cynically appraised by his employees. Jim Sephton, one of the small number of apprentices who became a senior manager at Herbert's, remembers an occasion during the 1930s when Sir Alfred summoned his staff to announce his decision to start a staff pension scheme. After informing his audience of his intention to contribute several thousand pounds to this new fund, he sat down and waited for some acknowledgement of his benevolence, a vote of thanks at least. Instead, the room fell silent. Everyone, Jim recalls, was busily trying to work out the boss's 'angle' on the gift. After an awkward silence, Herbert rose and left the meeting. Later, staff were informed that he had decided to withdraw the scheme because of their apparent ingratitude. (Subsequently, he changed his mind once more, and introduced the scheme as planned.)" Of course, it is virtually impossible to know how far attitudes expressed by former employees in the 1980s reflect those felt half a century before. But if these dissenting views had some substance then, I would argue that they reflected both the particular and general circumstances which lessened

workers' dependence on the employer. For adult male workers with skills that were not locked into the firm's internal labour market, and for adolescent trainees who were free of family responsibilities, for example, employer paternalism had little merit; and for all but the oldest employees, the re-armament boom from the mid-1930s must have reduced, very considerably, their fear of dismissal.

Conclusions

Key features of Herbert's labour management policies locked together to provide a stout defence against the development of a shop stewards' organisation inside Edgwick's engineering shops. The "vast apprenticeship system" provided the means to reproduce a core of skilled workers imbued with the 'Herbert Spirit', to produce a constantly shifting population of semi-skilled workers and, through the gang system, to offer the 'rated men' opportunities to increase their earnings at the expense of their younger colleagues. Despite the ravages of time, the gang system continued to ensure that Herbert's low-wage policy was mediated through a stratum of semi-supervisory workers who also held together the formal and informal systems of control. Lastly, Herbert's conscious efforts to develop a paternalistic style of management provided countervailing pressures against the worst excesses of the gang system and created an ideologically hostile environment for trade union activists. Nonetheless, 'dissenting beliefs' survived and as re-armament transformed Coventry into

the tightest concentration of light engineering in the country, created systematic and excessive overtime at Edgwick and still brought hundreds of immigrants and youths flooding into the factory, a few workers decided it was time they extended the shop stewards' organisation beyond the craft enclave of the patternshop.

Chapter Four: Endnotes and References

1. John McGrath Davies, "A Twentieth Century Paternalist: Alfred Herbert and the Skilled Coventry Workman", in *Life and Labour in a Twentieth Century City: The Experience of Coventry*, (eds.) Bill Lancaster and Tony Mason (Coventry: Cryfield Press, n.d), pp. 104-5.
2. See Noreen Branson and Margot Heinemann, *Britain in the Nineteen Thirties* (St. Albans: Panther, 1973), pp. 92, 125-6, 131; also Jonathan Zeitlin, "The Labour Strategies of British Engineering Employers, 1890-1922", King's Research Centre, undated mimeo, pp. 5-7, 19, 24.
3. Doris Digger, interview held on 4 March 1982.
4. Ruth Dyer, interview held on 27 July 1982.
5. Joan Hughes, interview held on 22 June 1982.
6. Phillip Banks-Price, interview held on 8 June 1982.
7. Ron Green, interviewed on 2 February 1982.
8. Ibid.
9. Bernard Wall, interview held on 21 June 1982.
10. Bernard Woolly, interviewed on 14 June 1982.
11. Bill Elliston, interview held on 12 June 1982.
12. Edmund P. Learned, Francis J. Aguilar and Robert C.K. Valtz, *European Problems in General Management* (Homewood, Ill.: Richard D. Irwin, Inc. for IMEDE, 1963), p. 30.
13. This figure is a guesstimate, based on oral accounts of the

shopfloor impact of the recession and records of the decline in the firm's profits during this period.

14. Vic Brown, interviewed on 7 July 1982.
15. Tom Batchelor, interview held on 2 March 1982.
16. John Elliston, interviewed on 12 June 1982.
17. Richard Croucher, *Engineers at War, 1939-1945* (London: Merlin Press, 1982), p. 47.
18. See, for example, Gloria Lee and John Wrench, *In Search of a Skill* (London: Commission for Racial Equality, 1983).
19. Bernard Wall, interview.
20. Martin Smith, interview held on 20 May 1981; Ron Doughty, interviewed in March 1982.
21. Sid Birch, interviewed on 19 July 1982.
22. Fred Lynes, interview held on 15 July 1982.
23. Tom Batchelor, interview.
24. Croucher, *Engineers at War*, p. 13.
25. Ron Green, interview.
26. Phil Barnes, interview held on 10 June 1982.
27. Bernard Woolly, interview.
28. Harry Earle, interviewed on 22 June 1982.
29. Fred Lynes, interview.
30. The same story is referred to in Richardson's account of Oscar Harmer. See *Twentieth Century Coventry* (Coventry: City of Coventry, 1972), p. 35.
31. H.E. Hyland, extract from an essay published in *Alfred Herbert News*, May/June 1940.
32. Phillip Banks-Price, interview.

33. Bill Elliston, interview.
34. Croucher, "Left Wing Politics and the Shop Stewards' Movement in Engineering, 1935-46" (Ph.D. thesis, University of Warwick, 1978); Andrew L. Friedman, *Industry and Labour: Class Struggle at Work and Monopoly Capitalism* (London: Macmillan, 1977).
35. Croucher, "Left Wing Politics", p. 218.
36. Friedman, *Industry and Labour*, p. 200.
37. Craig R. Littler, *The Development of the Labour Process in Capitalist Societies* (London: Heinemann Educational Books, 1983), pp. 79, 82.
38. Compared with Littler's account, Sidney Pollard's treatment of sub-contract systems is ambiguous. See, *The Genesis of Modern Management: A Study of the Industrial Revolution in Great Britain* (Harmondsworth: Penguin Books, 1968), pp. 51-63. Similarly, Richardson's brief references to the gang system are inadequate for the purposes of this chapter. See, Richardson, *Twentieth Century Coventry*, pp. 114-5.
39. Friedman, *Industry and Labour*, p. 213.
40. Ibid., pp. 213, 291.
41. Croucher, "Left Wing Politics", p. 218.
42. Ron Green, interview.
43. Phillip Banks-Price, interview.
44. Ron Green, interview.
45. Ibid.
46. Workers' general preference for stable earnings under any system of Payment-By-Results has received some attention in

- the literature on industrial relations. See, for example, Tom Lupton's "On the Shop Floor: Output and Earnings" in *Payment Systems*, (ed.) Tom Lupton (Harmondsworth: Penguin Books, 1972).
47. Croucher, *Engineers at War*, p. 77; Richardson, *Twentieth Century Coventry*, pp. 65-72; Friedman, *Industry and Labour*, p. 209.
 48. Observations on the 'fiddles' were related by Digger, Barnes and Brown.
 49. Tom Batchelor, interview.
 50. Ron Green, interview.
 51. David Schloss, *Methods of Industrial Remuneration* (London: Williams and Norgate, 1892), p. 88. Schloss claimed - see p. 72 - that this kind of 'bullying' was one of the principal grievancies of the dockworkers in the strike of 1889.
 52. *Ibid.*, p. 65.
 53. *Ibid.*, p. 81.
 54. Littler, *The Labour Process*, pp. 66-72.
 55. Schloss, *Industrial Remuneration*, p. 74.
 56. *Ibid.*, p. 73.
 57. *Ibid.*, p. 74. See also M.L. Yates, *Wages and Labour Conditions in British Industry* (London: MacDonald and Evans, 1937), p. 91.
 58. Eric J. Hobsbawm, *Industry and Empire*, p. 182.
 59. Littler, *Labour Process*, pp. 92-4.
 60. *Ibid.*, pp. 90-2.
 61. *Ibid.*

62. Ibid.
63. Richardson, *Twentieth Century Coventry*, p. 41.
64. Davies, "Twentieth Century Paternalist", pp. 116-7.
65. Patrick Joyce, *Work, Society and Politics: The Culture of the Factory in Late Victorian England* (London: Methuen, 1982), p. 164.
66. Ernie Digger, interview.
67. *Alfred Herbert News*, February 1928, cited by Davies in "Twentieth Century Paternalist", p. 101.
68. Davies, "Twentieth Century Paternalist", p. 115.
69. Ibid., pp. 115-6.
70. Ibid.
71. Littler, *Labour Process*, p. 93.
72. Joyce, *Work, Society and Politics*, pp. 162-3.
73. Davies, "Twentieth Century Paternalist", p. 115.
74. Ibid.
75. Bernard Wall, interview.
76. Davies, "Twentieth Century Paternalist", p. 123.
77. Phillip Banks-Price, interview.
78. Joyce, *Work, Society and Politics*, pp. 144-5; Pollard, *Genesis of Modern Management*, pp. 231-42.
79. Richardson, *Twentieth Century Coventry*, pp. 34-5.
80. Joyce, *Work, Society and Politics*, p. 149.
81. See articles published by Alfred Herbert in *Shots at the Truth* (Coventry: Alfred Herbert Limited, 1948), pp. 58-63, 75-6, 79.
82. Davies, "Twentieth Century Paternalist", p. 113.

83. Idem, "Twentieth Century Paternalist", draft version of article, p. 22.
84. Ibid., p. 9.
85. Joyce, *Work, Society and Politics*, p. 146.
86. Ibid., p. 136.
87. Littler, *Labour Process*, p. 97.
88. Richardson, *Twentieth Century Coventry*, pp. 12-5, 37, 55, 100.
89. Littler, *Labour Process*, ch. 8.
90. Richardson, *Twentieth Century Coventry*, pp. 21, 64.
91. Zeitlin, "The Emergence of Shop Stewards' Organisation and Job Control in the British Car Industry: Review Essay", *History Workshop Journal* 10 (1980), p. 126.
92. Joyce, *Work, Society and Politics*, pp. 118-9.
93. Frank Carr, "Municipal Socialism: Labour's Rise to Power", in *Life and Labour* (eds.) Lancaster and Mason, pp. 172-3.
94. Lynn Hollen Lees, "Review of Patrick Joyce, *Work, Society and Politics*", *Social History* 8, 2 (May 1983), p. 243.
95. Jim Sephton, interview held on 24 June 1981.

CHAPTER FIVE: HERBERT'S AT WAR.

Introduction

Having recognised both the obstacles to effective organisation and, at the same time, the sources of union-based opposition on the shopfloor, this chapter attempts to chart the development of the stewards' organisation at Edgwick from 1930 to the end of the 1940s. While the chapter has a chronological order, I have not sought to provide an exhaustive and critical history of workplace politics at Herbert's during that period (a useful project that must be left to other researchers). Instead, I have focused on four episodes: the re-emergence of a workplace organisation outside the enclaves of craft labour in the patternshop during the 1930s; the lull in union activity during the period from the Phoney War to the People's War, covering the years 1939-41; the period of consolidation during the "heyday of the Communist engineer" in the years 1942-43; and, lastly, the shop stewards' struggle to survive peacetime conditions. These four episodes provide a broad history of the entire period and, more importantly, raise issues which I intend to consider in greater detail, and within a longer historical span, in later chapters.

The Re-Emergence of a Stewards' Organisation

Hard times: 1922-32

After the 1922 Lock-Out, trade union organisation at Herbert's was pushed back to the craft enclave in the patternshop.¹ In the machine shops, fitting shops and toolroom - then located at the Butts - the ASE shop stewards' organisation collapsed and what membership remained appeared thoroughly intimidated by the company's determination to assert "management's functions" and impose severe wage cuts in line with the objectives of the Engineering Employers' Federation.²

The survival of the patternmakers' shopfloor organisation was perhaps unremarkable. Situated in splendid isolation at Edgwick, on the northern perimeter of the city, the patternshop was small; their work remained exceptionally skilled; and the UPA's district organisation still retained some authority in local industrial politics. The contrast with the toolroom, that other enclave of craft labour, was stark.

The AEU's district organisation was demoralised: many of its activists had been victimised, and its membership more than halved. In February 1923, the DC Secretary reported that membership had fallen from nearly 14000 in 1920 to 5900.³ In comparison to the patternshop which employed less than 30 workers, Herbert's toolroom was vast. When management transferred

the main works to its Edgwick site in 1928, the toolroom came to occupy two large bays within the Heavy Machine Shop and employed over two hundred workers. Also unlike the patternshop, the toolroom was not an exclusive centre of craft excellence. To a certain degree, management had succeeded in routinising and de-skilling toolroom work and this was reflected in the composition of the shop's labour force. There was a core of skilled toolmakers, probably no more than 60, who were involved in proto-type or one-off jobs and left very much to themselves to organise their work on a day-to-day basis. Many more workers did small-batch jobs, producing tooling for the firm or its clients. Lastly, there were some operatives, usually 'boys', who performed semi-skilled operations on capstan lathes and drilling machines and who came under particularly close supervision. The size of Herbert's toolroom and the diversity of its skills inevitably assisted management's resistance to paying the toolroom rate - even during the 1914-18 War when there was some semblance of a shop stewards' organisation at the Butts. At the beginning of the 1930s, when management imposed wage cuts again and short-time working, the membership of the AEU (formerly the ASE) - already weak and scattered across the plant - must have diminished even further. The District Committee (DC) had to depend on its branch organisation to be kept informed of pay and working conditions at Edgwick, and if the union possessed any kind of collective presence on the shopfloor it had a clandestine character. Almost invariably the union's district officials had to negotiate with works management on their own, over the few grievances that were

brought to the DC's attention during this period, largely, I suspect, because of fear of victimisation. Certainly, this had been the case in 1924 when the DC felt obliged, after hearing a report on the introduction of female workers at Herbert's, to "urge all members not only to give information to the Secretary but to protest inside the shops in accordance with (the) Agreement";⁴ and there is nothing in the records to suggest that matters had improved much eight years later. For example, in June 1932, when the DC decided to approach Herbert's to "secure such adjustments on (the price of the) No2 S as were required", it appears that the district officials had to enter negotiations on their own.⁵ But if some people kept their union membership "dark" at work,⁶ this did not prevent others from playing a more conspicuous role in politics outside the factory.

Commenting on Labourism in Coventry during the 1930s, Hinton observed that, though most leaders of the Labour Party were, or had been, engineering workers, when Labour finally captured power on the City Council in 1937 there was little link between Labour politics and life in the factories.⁷ Herbert's proved no exception to this "Labourist fracture".

In 1933, while the AEU members at Edgwick continued to negotiate with management by proxy and "everything was done under-handed like",⁸ one of the toolroom workers became Coventry's first Labour Mayor.⁹ 'Tommy' Harris was then nearly 68 years old and had worked in Herbert's toolroom since 1903. In one way, his

achievements were a reflection of the weakness of trade unionism at Herbert's (and also, of course, at other local engineering factories). Municipal politics offered an escape from the oppressive regime of the factory.¹⁰ But it is probable that Harris' achievements as a councillor also may have been secured at the expense of the union's position in the plant. I have no direct evidence to establish this point. However, it seems a reasonable interpretation to impose on the remarks made on the occasion of Harris' retirement in 1940. The works director described Tommy as "a staunch trade unionist" who had "always proved a steady influence on the works". In his reply, Harris, by then an alderman and magistrate, said how deeply indebted he felt for being allowed to carry on his civic work. The fact that his employer had allowed him to perform his duties as a councillor even though their views may not have coincided was, Alderman Harris said, "an example of the great heritage of liberty which we as a nation enjoyed".¹¹ "Tommy" could have spoken of Sir Alfred as a "rare example" of that heritage for, during the 1930s, the Co-op was virtually the only other employer in Coventry that allowed Labour activists time off to carry out Council business.¹²

The Arcon contract: 1932-36

Herbert's was among the first engineering firms in Coventry to recover from the inter-war trade depression, largely as a result

of the Soviet Union's industrialisation programme. In 1932, the company secured a major contract from Arcos, a Soviet trading agency, which immediately brought an end to short-time working at Edgwick and quickly restored systematic overtime.²³ Bill Elliston recalls:

"As an apprentice, short-time didn't affect me; but for the ordinary men, the skilled men, there was one week in and a fortnight out, you know. And there was no supplementary benefit and things like that...Times were really hard. And then the Russians came along in 1932, and they bought up every bit of stock that Herbert's had got...And from that day on we never looked back. We went on full overtime. It was eight in the morning until eight at night, Saturday mornings until 12."²⁴

Very soon even "full overtime" was not enough to meet the Russian delivery dates.²⁵ More labour was needed; much more. In 1921, the firm employed 2700 workers; by 1930, the nadir of the depression, it had probably slumped to 2000; five years later, the workforce had nearly doubled to 3700; and by 1938 it had risen to 4500.²⁶

Initially, these conditions may not have favoured union organisation. Rising wages and plentiful overtime in a period when many engineering factories in the district remained on short-time were likely to have suggested the relative advantage of employment at Herbert's rather than underlined the need for organisation. But within two years, the AEU district officials,

through the union's branch network, could sense the stirrings of discontent that were slowly shifting factory politics in their favour.

In the previous chapter I tried to show that, during the inter-war period, factory politics at Herbert's created a particularly hostile environment to the development of a shop stewards' organisation because of the strength of the firm's variant of employer paternalism and the delegated control exercised through the piecework gang system. However, some of the supports for that regime must have been dislodged by the flood of new workers into the plant.

There can be little doubt that many of the hundreds of local youths Herbert's recruited as trainees during the early 1930s did not feel especially grateful to the firm for their jobs. Bernard Woolly was one such youth. When he left school in 1933, his father fixed him up with a job at Daimler. For a few months Bernard spent his time "running errands", then he was put on "an old tub grinder" and "stuck that" that until Christmas, when he got a job at Herbert's.

"So I'd be 14 at the time. And I left there when I was 17.

*And then I went to Singer. And from there to Siddelay...And from there I went to Morris."*¹⁷

Unlike Vic Brown, who was recruited as a craft apprentice at about the same time, Bernard's comments on his time at Herbert's betrayed little trace of gratitude. As far as he was concerned,

his time at Herbert's simply provided him with a passport to all the other firms in Coventry - hardly the attitude to keep employer paternalism alive.

The flood of new workers also included immigrants from the depressed regions of the country. Undoubtedly, as Zeitlin observed of the Welsh migrants who sought employment in Oxford's motor industry,¹⁰ many brought with them "well-developed trade union traditions" which contributed to an anti-boss consciousness at the plant. (In 1940, Herbert's works director felt that he could legitimate his resistance to the formation of a Joint Production Committee by telling the shop stewards "there were many men who appeared to have no faith in the management".¹¹) There is strong evidence in workers' recollections of this period to suggest that, as Zeitlin also observed in the case of the motor industry, these same migrants played "an important role in the revival of union organisation in the 1930s".¹² For example, Harry Marston, a migrant himself, gained his place on the TGWU's district committee through the sponsorship of a Bradford man, Bro. Poole, a detail inspector at Herbert's.¹³ Vic Brown, a local lad who was persuaded to become a shop steward by Harry, recalls:

"As you know, the union wasn't very strong, and then these men came down from the North, from Yorkshire and Lancashire: the Isherwoods, Harry Marston...Reg Williams came from Wales."

Just outside the Edgwick works, the Vauxhall Working Men's Club provided the venue for the Vauxhall AEU Branch which probably

provided the most important organisational focus, off-premises, for Herbert workers. Not surprisingly, this branch was started by "the two Isherwood brothers".²² Given the scale of recruitment that took place during the 1930s, I should think the experienced trade unionists were able to form a core of activists among the migrant workers. But their appeal would not have been limited to such workers. I have no doubt these new shopfloor activists were assisted by a continuing sense of vulnerability felt by skilled workers at the plant.

In his review essay on the emergence of shop stewards' organisation in the British car industry, Zeitlin observed that: "where skilled workers found themselves fighting what they believed to be a losing battle against employers, they might turn towards an alliance, temporary or permanent, with the less skilled."²³ In this instance, I do not think the skilled machinists and fitters saw themselves in a losing battle with Herbert's; but, unlike the patternmakers, they must have been very conscious of their weak bargaining position and the need for an alliance with the less skilled. This, I think, was especially true for the majority of the toolmakers. However, the only direct evidence of this alliance appears in the DC minutes which provide some interesting data on the background of Edgwick's first AEU shop stewards. After the toolroom and reconditioning departments elected their shop stewards, workers in the "Factory" met next. A broad range of skills were represented at that meeting, including grinders, capstan operators, fitters, tool store workers and

labourers. In December 1936, when the AEU stewards met and chose their senior stewards, I think it is significant that a toolroom worker, Bert Horton, was elected convenor, and A.J.Mills, a miller in the Factory, was elected secretary.

Reminiscences about the organisational activities of some migrant workers and evidence of a resistance to the ideology of employer paternalism among some of the other new workers convey the impression that the shop stewards' organisation developed autonomously at workplace level. This interpretation of events is also supported by a number of academic studies, such as Zeitlin's account of the motor industry and Croucher's comments on the engineering industry in the period of re-armament.²² The minutes of the AEU's District Committee, however, suggest a very different story. These records lend themselves to the argument that the shopfloor organisation which re-emerged at Herbert's was largely the product of the DC's recruitment drive, assisted by management's anxiety to meet the delivery dates for the Arcos contract and avoid a confrontation with the unions that could isolate the firm within the employers' federation.

In this alternative account, the struggle to re-build a shop stewards' organisation at Herbert's began in 1934. In June of that year, chargehand members met district officials to answer the charge that they had been "bribed" with higher base rates to accept certain price cuts. Whatever the substance of the allegations, the minutes indicate that the chargehands felt

obliged to promise to "help the Society in Propaganda".²² The same minutes also record the firm's argument that systematic overtime was necessitated by the delivery dates imposed by the Russian contract. Over the next two years, the district officials continued to exploit such grievancies as rare opportunities to pursue a recruitment drive. In November, 70 workers attended a meeting to discuss "the extension of female labour and other matters", namely overtime and gang piecework prices.²³ The same issues were aired at two more meetings held a month later. There followed a lull for a year. Then, in June 1936, after receiving reports on meetings with chargehands and inspectors, the DC instructed its officers to convene a meeting of the "Big Machine Shop". In July, it was informed that only 50 had attended and so the meeting was adjourned to a Saturday lunch-hour at the end of the month. One DC member volunteered to take "handbills...inside the shop and see that they were effectively used".²⁴ At this adjourned meeting, "a Sub-Committee was appointed to arrange details of Sections requiring Stewards and then to take nominations from those sections."²⁵

This marked the breakthrough. From this point it seems that a core of activists on the shopfloor, essentially the "Sub-Committee", was able to take direct control of the recruitment and organisation. Through the autumn months, this "Sub-Committee" quietly pursued its work until it was able to convene a series of "propaganda meetings" in November. First, workers in the toolroom and re-conditioning departments elected

five shop stewards.²⁰ A week later three shop stewards were elected in the fitting shop.²¹ After a gap of a fortnight, eleven were elected to represent a diverse membership in the "Factory Department" including skilled workers in the fitting shop and tool stores, semi-skilled capatan and auto operators, and labourers.²² Finally, a week later, two stewards were elected in the main machine shop.²³ There is no evidence that management actively sought to block these developments on the shopfloor. On the contrary, when the AEU presented its list of the shop stewards, Herbert's acknowledged their credentials within a matter of days.²⁴

It is likely that the truth of the matter lies somewhere between these conflicting emphases on internal and external stimulation in the development of the shop committee. Obviously, much depended on developments within the workplace; but, as Tolliday observed in his research on shopfloor organisation in the British car industry, the growth of workplace organisation also depended "crucially on the policies, and organisational structures of unions and on managerial strategies".²⁵

"Youth Makes History"²⁶

The available evidence suggests that the new shop stewards were relatively young men. George Smith was about 28 years old when he

was elected shop steward at that inaugural meeting of Herbert's AEU members."⁷ Vic Brown became a shop steward as soon as he came out of his time."⁸ Tom Batchelor claims he was elected at 19 years of age."⁹ Not surprisingly, it seems that they had most success in recruiting among their contemporaries. Ron Green can recall that even when management recognised the union, "there was still a lot that wasn't in, and they'd been there for years"¹⁰ and Vic Brown clearly recollects that:

*"It was usually the older ones, the old timers, who wouldn't join the union. Blokes my age who were round about 22, 23 and 24, up to 35 (would join); but the old blokes, they would never join the union."*¹¹

Significantly, while these relatively young shop stewards were still "feeling their feet a bit" in factory politics, building up membership by "underhanded ways", one of the first issues they addressed was the question of the rates for individual "young journeymen".¹² (Some members had complained that when they came out of their time, as craft apprentices, they received less than the rate fixed by the Young Journeyman's Agreement which governed pay for the first year after apprenticeship and was itself less than the full rate for a skilled worker). But the shop stewards did not anticipate that even younger workers would make a direct contribution to the development of the workplace organisation at Herbert's.

National pay agreements had widened the gap between adults and

apprentices in the mid-1930s,⁴³ and many young workers were conscious of their exploitation by employers during this period. In Croucher's words, these and other grievancies brought "workers previously thought to be among the most 'backward' sections of the working class exploding into incandescent militancy".⁴⁴ The Apprentice Strike of 1937 began on the Clyde in March that year. A series of stoppages then followed in April and May, and though they were confined to Scotland, their reverberations were felt in Coventry. For example, in April a deputation of young workers from Armstrong Whitworth Aircraft complained to the DC that "many youths with experience were being called upon to teach (new) men who were getting three or four times the amount of money";⁴⁵ and through the summer the DC continued to receive reports on apprentices' grievances - including one from the shop stewards at Herbert's.⁴⁶ Then a second wave of strikes took place in September and October. It started in Salford, but quickly spread to engineering factories in Coventry.

At the beginning of October, Bert Horton reported to the DC that at a regular Wednesday meeting, held for "Propaganda" or recruitment purposes, "boys turned up in such numbers that the room was inadequate and the meeting turned into a Boys Meeting". A six-strong delegation - composed equally of apprentices and "non-indentured boys" - was elected to put their demands for higher pay to management. After the anticipated rebuff, "the whole of (the) boys walked out of the shop at 11.30am on Friday" and Horton himself "called a meeting of the Stewards at the

dinner hour on Saturday to organise support for the Boys".⁴⁷ The managers' response was characteristic. They refused to meet a deputation while the strike continued and asked the chargehands to encourage a return to work - even "to the extent of personal visits to the boys' homes".⁴⁸ Despite this kind of paternalist intimidation, the strike remained firm. Indeed, at the meeting when the DC called for a district-wide return to work on 18 October, Horton had tabled a resolution that the strike continue until all the demands had been satisfied.⁴⁹

The action taken by the apprentices and trainees at Herbert's can be seen as a reflection of a growing confidence among the young workers; a realisation that they could safely challenge management's power and ignore the jeremiahs among their seniors:

*"Most of the back chat was from the older ones: 'You bloody fools!' and that, you know. You see, they lived through a depression and always had a job, and that made them thankful"*⁵⁰

Sometimes that confidence was expressed through more individualistic activities as Vic, a member of the "boys'" strike committee, can recall in the case of one of his workmates:

"And he got into trouble 'cause there was a strike on and he went touring round Wales, and half way through the week we went back to work and he didn't know."

Perhaps Vic's mate was caught out because he had not anticipated the strength of the city-wide campaign which forced the local

engineering employers' association to concede quickly to the strike demands. In Croucher's account, the BEA conceded increases of between one and three shillings per week and trade union recognition. At Herbert's, the apprentices wrung 1/3 from their management. It was a small gain, but a great victory which gave the other workers clear proof that the character of factory politics was changing decisively in their favour especially as it came shortly after management's recognition of the toolroom.

Management's consistent refusal to pay the toolroom rate was one of the first issues the newly-formed shop stewards' committee decided to tackle. This was hardly surprising. The toolroom was the first shop to organise, and one of its shop stewards was subsequently elected convenor. A group of skilled workers in another department, the factory tool stores, had a vested interest in this issue as they also wanted to claim toolroom rate. But it was not just a sectional question. It was also seen as a test of the credibility of the shop stewards' organisation and one which the district officials were determined to see come to a successful conclusion. So it was significant that victory (of a sort) came relatively quickly. The issue was first raised by the shop stewards in December 1936. After a Local Conference in May 1937, management agreed to recognise the toolroom. But it was not an unqualified triumph. The agreement was applied to "all men except Capstan Operators and Drillers" and "new men with no previous experience of Tools" who would be given a month's trial before being considered for the rate.²³ Nonetheless, the speed

with which this agreement was reached must have provided a fillip to the shop stewards in their efforts to organise the plant.

After their success over the toolroom and the "boys'" strike, the shop stewards must have taken up a whole range of issues, and sometimes with equal if not more success, but very little is said of these activities either in the DC's minutes or in workers' recollections. One exception to this is the vexed question of workers who accepted jobs at Edgwick that were under the district rate. A few cases were brought to the DC's attention which then responded by demanding the removal of these "non-ers". But I suspect that most cases were dealt with in the way Ron Green responded to one worker's complaint:

"Well, this particular fellah come in on the fitting. He hadn't been there a month when he came to me and said, 'I'm working under rate and the bloke next to me is getting the rate. I'm getting 38/-.' I said, 'You knew the rate for the job and you started at 38/-?' He said, 'Yes, I wanted a job.' I said, 'You've got one.'"

Such cases were a frequent and painful reminder to the shop stewards of the limitations of their achievements thus far. On the positive side of unionism at Herbert's, nothing is recalled until the summer of 1938 when the shop stewards broke the smoking ban.²² Initially, they gained no more than two half-hour periods each day;²³ but it clearly meant a lot to the people I interviewed as it was recalled by all who worked on the shopfloor at that time.

It is not too far-fetched to argue that, in terms of factory politics, this concession symbolised a kind of coming of age for both the workers and the shop stewards' committee. Smoking, as a social habit, had long been associated with ideas of adulthood and, in a particular way, this association was carried through into the harsh regime of inter-war factory politics. Smoking at work, like smoking at school, could only be performed publicly by figures of authority: the subordinates were compelled to smoke in the toilets. A violation of this rule could mean instant dismissal. Herbert's was no exception. On the contrary, one strand of its paternalism - the myth of Sir Alfred "cadging Woodbines" from his employees - reinforced the same message: while the "paternal" employer smoked his employees' cheap cigarettes, the "lads" had to look on. If this interpretation is correct, then it is hardly surprising that some shop stewards saw the concession on smoking periods as a marvellous recruiting sergeant for the union.

"I think there was about 17 in the union when I joined...17 fitters. And then overnight it became - when they got this smoking concession - it suddenly leapt to about 60% on the fitting. It was quick. It was a rush...I remember they were queueing up on the stairs (at the Vauxhall WMC) to join the union...That was Isherwood; he was behind all that. They really had a good push.""

The smoking concession was seen as a particularly important

breakthrough for the trade union activists at Herbert's; but I do not believe Isherwood, or any of the shop stewards, would suggest that it entirely explained their recruitment successes. It was another concession which greatly enhanced their credibility among their colleagues; but it came at a favourable moment, for within the workplace, changing conditions were providing a seedbed for union organisation. Since 1932 there had been "excessive and systematic overtime" and after September 1938 those long hours had to be worked under artificial light as management imposed blackout conditions.²² There were complaints about "dilution" as more women were recruited onto the shopfloor and semi-skilled workers put onto jobs customarily done by skilled men; and also complaints about working conditions. In effect, workers at Herbert's were experiencing the re-armament "boom" at least four years before most engineering factories in Coventry. From 1936, when UK defence orders generalised the "boom" and transformed the city into the tightest concentration of light engineering in the country,²³ union recruitment at Edgwick was undoubtedly assisted by the consequent changes in industrial politics outside the plant: the tightening labour market, the growing mood of self-confidence and militancy among shopfloor activists.²⁴

Compared to the activities of the shopfloor organisations at the aircraft factories, such as the Armstrong Whitworth Aircraft plant at Baginton, these achievements appear unremarkable. But, given the character of production at Edgwick - which in some ways could be better compared to the larger motor firms than the

aircraft industry - they were no poorer than those secured at some of the other major engineering firms in Coventry at that time, such as Armstrong Siddeley Motors, Humber and Riley, and considerably better than some, such as Singer, Carbodies, BTH and GEC.** This is rather different from the view that comes through Croucher's account of the gang system in Coventry where Herbert's is placed at the opposite end of the spectrum to Standards.** I would suggest that one reason why this writer exaggerated the "backwardness" of factory politics at Edgwick is that he was uncritical in his use of the comments of Herbert veterans. These men, like Ernie Digger who claimed that Herbert's was the last to recognise its toolroom, tended to compare their experience of unionism with the image of Standards as the model of factory politics in Coventry's engineering industry. Their views should be balanced with those of Bernard Woolley, who worked at Daimler, Singer, Morris' and elsewhere. He commented that "the only place I've known the union strong is Triumph, Canley (the Standard plant - KG)".

Popular Front politics at Herbert's

Most workers' reminiscences on trade unionism at Herbert's also give a misleading impression of the politics of the early activists. Vic Brown, for example, who became a shop steward during the war, commented:

"But once it was started, it was never what you would call a 'hot-shop', never; never anything hot-headed or anything like that."

Similarly, only one worker recalled that the first AEU convenor was Bert Horton - others named Nixon or Warr - who, if he was not exactly "hot-headed" (whatever that meant), was both an unusually active trade unionist (In January 1940, he was elected as one of the two shop steward representatives to serve on the DC)⁸⁰ and a leftist. On one occasion he moved a resolution which demanded that "arms made will not be used to help Fascist states destroy Democratic peoples in Europe";⁸¹ and I would suggest that his influence was instrumental in the shop stewards' decision to bar a "Fascist Leader" from AEU membership.⁸² It is, of course, possible to exaggerate the significance of both actions. After all, the revival of trade unionism at Herbert's took place at a time when the politics of the Popular Front enjoyed broad support in the labour movement, and even right-wing Labour leaders were prepared to pay lip-service to it by supporting leftist resolutions. The action against the fascist may have been largely provoked by himself. Tom Batchelor claims "Frank Massinguard", who worked on his section though, significantly, on the night-shift, was "the leader of the Coventry Union of Fascists". Nonetheless, the bar on Frank's membership betokens more than 'resolution mongering'. The shop stewards' decision had to be defended at the DC; and I know of no similar controversies caused by AEU leftists elsewhere in Coventry during this period. (After his protest, "Frank Massinguard" decided to seek a new life, and

possibly a new identity, elsewhere. Tom Batchelor recalls that when the war started, the fascist left Herbert's and "went to Australia".)

TGWU gain a 'toehold' at Herbert's

Until a few months before the War, the story of the revival of shopfloor organisation at Herbert's was essentially a story of the AEU. The second major union in Coventry, the TGWU, had members at Edgwick from the early 1930s if not before; and yet it seems that they chose to keep a very low profile until the end of 1938. It is difficult to understand why this was so unless, as it appears from what little information is available, the union's district organisation had tacitly accepted Edgwick was part of the AEU's 'territory', and so left its own membership to organise on their initiative. If this was the case, the key 'organiser' was Harry Marston.

Harry started work at Herbert's, as a machine tool fitter, in 1934. He had joined the Workers' Union at 14 when he went to work at a wool mill in Keighley, and though he became a skilled fitter, retained his membership in that union (which, by then, had merged with the TGWU) when he moved to Coventry. Despite his evident commitment to trade unionism, it seems that he did not begin to seek new members until December 1938. One of Harry's first contacts was "Bro L. Poole on inspection who came from

Bradford" and was already a TGWU member. However, Harry's recruitment drive had very modest results. When he first went onto the union's district committee, apparently through an introduction by "Bro Poole", he represented six members. Nonetheless his efforts provoked "some haggling by AEU members who I worked with". In the circumstances, this was understandable. He was working in a skilled area and among AEU members who had already built a plant-wide organisation (which included semi- and unskilled workers) in much more dangerous times. Though the AEU's records suggest that this inter-union rivalry was first raised with the DC in December 1930, it was not resolved until the arrival of the War when Jack Jones, newly appointed as the TGWU's district organiser, took up the issue. Harry recalls:

"Bro Jones met (the) AEU organiser, W.H.Stokes, and the shop stewards' committee who decided to accept me provided I had their membership forms as well as our own union forms to approach unskilled labour into our union."

In one way this arrangement appeared to be no more than a cosmetic device, as Harry quietly proceeded to recruit crane drivers, truckers, labourers and female pieceworkers - all of whom had been largely ignored by the AEU - into the TGWU. But in another sense, this formal subordination to the AEU clearly signalled the future relationship between the two unions at Edgwick. To retain its toe-hold in the shopfloor organisation, the TGWU accepted the role of a junior partnership.

Shifts in Shopfloor Politics During the Phoney War: 1939-41

Initially, the outbreak of war must have caused few changes at Edgwick as the plant had been on a war-footing for some time. Blackout conditions were imposed after the Munich crisis; in April 1939 workers complained about lost time due to Air-Raid Precautions (ARP) practice;⁸⁴ and the shop stewards had become well versed in handling grievances about dilution and the extension of female labour. A few changes were made quickly to expand production: the product range was rationalised to a limited degree and machines made to a minimum standard or "war quality". But, initially, the war meant more of the same: more fresh labour, more dilutees, more workers on night-shift.

To meet part of this accelerating demand for production, a large sub-contract department was established, and small dispersal plants and a medium-sized shadow factory were set up in the outlying agricultural districts. The plant at Exhall (or No3 Factory as it was sometimes called) probably began producing tools in 1940.⁸⁵ Factories at Earl Shilton and Cosby started producing machine tool components in March 1941.⁸⁶ A small re-conditioning shop at Warwick was probably set up at about this time; the precise date is not known. The machine tool plant at Lutterworth was commissioned in November 1941.⁸⁷ In addition, the

labour force at Edgwick must have been expanded by one thousand or more. Given this scale of recruitment, it is not surprising that management frequently discussed labour shortages. This problem was shared by many engineering firms in Coventry (and undoubtedly persuaded Herbert's to site a small tooling factory at Glasgow in May 1942).**

By 1939, Coventry had become a major centre of munitions production. Three shadow factories were already in operation in the city and three more were opened during 1940. Between 1931 and 1939, over 42,000 immigrants, mostly single men, came to Coventry in search of work.** And yet the demand for labour remained insatiable. The resulting competition forced local employers to bid against each other. Cost-plus contracts from the Government and, from 1940, the existence of a compulsory arbitration system, also encouraged high wage policies in the city.

Initially, the local federation tried to deal with this crisis through a secret pact between employers. Thus, in June 1939, the AEU encountered an "embargo on members who voluntarily (left) their employment" in the federated companies.⁷⁰ However, it appears that this "embargo" did not substantially improve the situation for the employers. For, on 10 May 1940, Sir Alfred observed that while practically no skilled labour remained unemployed, the newspapers were full of advertisements for such work. The effect, he complained, was "simply to rob Peter to pay Paul".⁷¹ But it was not simply a question of the demand for

skilled labour as such. The high wages offered for repetitive, semi-skilled work on the production line in the local munitions factories were attracting machinists away from skilled work in the toolrooms. Sir Alfred tacitly recognised this fact only a few days later. When, on 20 May, Herbert reiterated his complaint about firms "tempting" employees away from urgent work, he added semi-skilled work to his proposed advertisement ban:

"At a recent meeting of our local Engineering Federation I proposed a resolution that no members should in future advertise for skilled or semi-skilled workers, and this resolution was carried unanimously."

The ban on advertisements had no better success than the 'embargo'. And, despite Sir Alfred's sponsorship, it was really no more than a token gesture towards employer solidarity. Managers of high-wage firms in the district did not need to advertise their vacancies. They could recruit their workforce through word-of-mouth. For example, George Smith hurriedly left Herbert's in 1938 when a friend advised him that Aero Mechanisations at Far Gosford Street were offering higher earnings for similar work. Nor did this ban stop Herbert's directors from considering the proposal to use sandwich boards to advertise for women workers in the agricultural districts." Both the secret 'embargo' and the advertisement ban had a Canute-like character to them.

Herbert's own labour shortages were compounded by Sir Alfred's

decision to hold a firm line on wages. As one director put it on a later occasion:

*"At the beginning of the war we adopted the policy of trying to keep our piece work prices as they were, but they would not yield sufficient earnings to the men to enable us to keep them..."*⁷⁴

Ron Green's recollections confirm this account:

"I was on about £9, £10 a week, which was very good because most were on £4 or £5 a week - which is what I'd said to you over the 'phone: before the war people at Herbert's were earning good money. Ironically, when the war broke out, people started to leave Herbert's to work in the munitions and most of them were starting on £20 a week, £20, £25, £35."

In response to this crisis, management decided to be "liberal with claims" while not actually altering the piecework prices.⁷⁵ Given the company's traditional 'tightness' on pay and Sir Alfred's protests about employer 'Peter' robbing fellow manufacturer 'Paul', it is likely that, initially, this device achieved only a marginal increase in pay, though by the end of the war claims for one month in the machine shop were calculated to be 40% of total wages.⁷⁶ It seems that this particular elastoplast did not work. The haemorrhage of labour continued.

Then in May 1940, the Emergency Powers Bill was enacted and the character of the labour market was suddenly altered. Among the regulations based on this Act, the Essential Works Order (EWO)

was specifically designed to end the free movement of labour. However, such was the magnetism of the local munitions plants that, a month later, the employers' association felt it necessary to negotiate with the trade unions a district agreement whereby all toolroom workers in member firms would be paid a fixed sum above the average earnings of skilled piece-workers in the district.

Sir Alfred never concealed his opposition to the Coventry Tool Room Agreement. He argued throughout the war years that instead of stabilising wage costs, the deal only encouraged "profiteering by labour". In an article published in the *Machine Tool Review*, one of his own house journals, in September 1941, Sir Alfred went on to castigate his fellow employers for their irresolution in the face of this challenge. "They take the line of least resistance", he complained." For his part, Sir Alfred remained determined that he would not concede substantial wage increases to gain higher productivity, even though the cost-plus contracts meant that this involved no financial penalty for the firm. His objections were twofold. First, as he explained to his own employees," this kind of wages policy was not "patriotic" since it undermined the economy by setting off an upward spiral of inflation (a point he also laboured in published articles throughout the War). Second, it eroded managerial authority. As I indicated in the previous chapter, Sir Alfred equated a tight control on labour costs with strong management.

If his wages policy made matters especially difficult for his managers, it is also likely that it had the same effect on the shop stewards' organisation. Croucher found that in the early years of the War local employers took advantage of the hysteria about "sabotage" and "communistic influence" to dismiss individual militants in an attempt to break the shop steward organisations in their plants."⁷ There is no evidence that such victimisations occurred at Herbert's, though it would be surprising if the shop stewards were unaware of these dismissals and did not see them as reminders of the dangers of militant trade unionism. Instead, I believe it more likely that morale was affected in a more insidious way by the downward shift in Herbert's position in the wages 'league' of local engineering firms in the months leading up to the promulgation of the EWO regulations. Some of the key shopfloor militants may have interpreted the drain of skilled labour from Edgwick - which included some of the stewards - as 'a vote of no confidence' in the workplace organisation,"⁸ and few stewards would have doubted that the disparity in wages was likely to grow in the succeeding months since they were still far too weak to challenge the firm's "patriotic" wages policy. If this was the case, the message would have been underlined by three events in the early months of 1940. In April, the shop stewards could only secure an agreement that gang pieceworkers had a right to know "the time allowed" for their jobs."⁹ Next month, after a worker had been dismissed for refusing to work overtime on Saturday afternoon and Sunday, the DC decided that action would only be taken on any subsequent

dismissals."² Also in May, management made it clear that there was to be no consultation over transferrals of labour requested by the Ministry of Labour: if workers did not volunteer, they would be forced to go."³ So it is not surprising that, after the EWO regulations came into effect, some activists - such as Bert Horton and Frank Isherwood - quickly volunteered for transferral to other factories."⁴ In this way Herbert's managers were able to deal with their more militant shop stewards without any visible confrontation."⁵

Not surprisingly the documentary evidence indicates that there was a marked lull in trade union activity at Edgwick for the next 18 months or so. One important documentary source is Walter Shepherd's notes on his meeting with the shop stewards. Shepherd was Herbert's first Industrial Relations Officer. It seems that, in common with many engineering firms at that time, his appointment was made in response to the flood of government regulations on labour, including welfare, working conditions and the national arbitration system, rather than due to pressure from the shopfloor."⁶ From 6 January 1941, Shepherd began to log his meetings with the shop stewards at Edgwick and the neighbouring dispersal plants. His notes indicate that he had very few meetings with the shop stewards during 1941: for that year they covered only 11 pages (which can be compared to 129 pages for 1942). If, as those minutes suggest, meetings with the shop stewards were infrequent in 1941, they also indicate that

management was anxious to assert its authority. One note in particular, on the "canteen committee", conveys this point well. Part of it reads:

"Mr Lloyd (Works Director - KG) said activities of Committee undesirable. Took up too much time of men and canteen staff, and endeavouring to assume authority. Committee to be disbanded.""

However, the weakness of the shop stewards' organisation does not mean that management's authority went unchallenged at this time. It seems that problems of discipline, such as absenteeism and late arrivals for work, grew worse during this period. More importantly, management found that it, too, was powerless to challenge events when, in the wake of the bombing on 14 November 1940, its workers (in common with many others in the district) in an apparently spontaneous protest, refused to work nights. Their response was understandable. This is how Hinton described that particular air raid:

"Then for ten hours on the night of 14 November 1940, in an attack more concentrated than anything experienced in London, German planes bombed Coventry. 568 people died; one house in three was seriously damaged; most of the city centre was obliterated; and war production was brought to a halt temporarily, through the direct destruction of plant, disruption of essential services, or the desertion of the workforce.""

At Edgwick, the fire station was demolished and seven workers killed. Most of the bombs missed the main buildings and production was resumed within four days,** but working conditions remained bleak for months afterwards, if Tom Batchelor's testimony is reliable.

"During the war when the roof were off and the heating was gone, we used to have a coke tin with holes knocked in it...And we used to work in our overcoats...And there was many a time when we used to come in to find ice on machines that wasn't working, and there used to be ice on the water in the shop. It was that cold."

The Herbert managers were unable to revive the night-shift until the early months of 1941 when the local employers' association offered to pay 50% of the bonus for the time workers spent sheltering from the bombs - at Edgwick most had to take cover "in the trenches" - and the Ministry of Supply provided helmets.**

The Limits of Change during the "Heyday of the Communist
Engineer": 1942-43

Among the earliest available minutes of the shop stewards' committee, there is one, dated 18 March 1942, which reads: "The officers were instructed to round up Stewards who had not attended our meetings recently." This "round up", if there was

one, only brought temporary success. At the next meeting, 21 stewards were present (an increase by 50% on the previous attendance); but the figures quickly slipped back to produce an average of 17. And yet other signs suggest that 1942 witnessed a definite revival in trade union activity at Edgwick.

The strongest evidence for this revival is provided in management's records. Not only did Walter Shepherd, the Industrial Relations Officer, cover 128 pages of his logbook for 1942 compared with only 11 for 1941, but these notes referred to over 200 meetings compared with only 15 meetings held in the previous year. In isolation, this could simply mean that Shepherd took a full year to settle into his job; but the trend it suggests is consistent with several general accounts of shopfloor organisation in the engineering industry during the War.

Croucher claims that a "red haze" settled over British politics after the Nazi invasion of Russia in June 1941 and until the end of 1942.²² Inside the factories, the victimisation of militants had largely ceased and employers were placed on the defensive, ideologically, by an irresistible campaign for Joint Production Committees which, strengthened by frequent and well-publicised accounts of managerial incompetence, challenged in a distinctively new way employers' "right to manage". If those months marked "the heyday of the Communist engineer",²³ it seems that nowhere was this more true than in Coventry. Croucher asserts that the Party had 33 factory branches in the city and,²⁴

in an article entitled "Coventry Communism", Hinton claims the CP had a "significant presence" in all the large factories."" In addition, as Tolliday observed, "the changed legal framework from the time of the Essential Work Order provided the unions with an alternative tactical repertoire with which they could supplement or bolster direct bi-lateral bargaining with management."" Over a wide range of matters from welfare provisions to waiting time, the stewards were able to use the threat of third-party scrutiny to make the managers more willing to negotiate with them.""

The shopfloor organisation at Edgwick may not have peaked in 1942 - like many other engineering factories, that probably came a year or two later - but I would argue that that particular year is worth detailed examination for two reasons: firstly, the records suggest that in this period of revival the stewards tested the limits of change at Edgwick; secondly it provides an opportunity to make a direct comparison between Hinton's and Croucher's account of "Coventry Communism" and factory politics at Herbert's.

Low pay at Herbert's:

During 1942, low pay must have remained the major issue for workers at Herbert's. Many with friends or relatives in the local munitions factories could relate stories of the fabulous wages

earned there. For example, when Ernie Digger's sister-in-law was conscripted into the munitions industry, she had a friend who "got her in at Barwell" where, after only six weeks training, she went onto piecework which, Ernie recalls, brought in wages that were "£5 or £6 more than me and I was a chargehand then building machines". Another Herbert veteran, Tom Batchelor claims it was "common knowledge" that "the men at Ryton were earning £20 a week" while "we were getting about £8 or £10". Of course, low pay is a relative question. Nationally, average earnings were significantly lower than at Herbert's. In January 1944, when wartime earnings peaked, average wages in the metal, engineering and shipbuilding industries stood at £7. 8s. 7d..* But the workers at Herbert's did not compare themselves with turners and fitters on the Clyde or the Tyne. Comparison were made much closer to home and, as I suggested earlier, they were conscious of the fact that, as early as 1938 when the local munitions plants moved into full production, other workers were earning more money on piecework without working the same horrendously long hours,

There are obvious dangers in relying on oral history, particularly on the question of pay. Memories can fade or be confused with more recent experiences; stories may be exaggerated to underline a particular message or simply entertain the researcher. One or other of these things must have happened in Ron Green's case. He recollects meeting, through the Home Guard, former colleagues who "were getting £60 a week". These were

indeed fabulous wages. Croucher claims that at the highest-paying factory in Coventry, skilled pieceworkers were then paid (pre-tax) an average of 5.34 shillings per hour.** Yet I would suggest that Ron's recollection truthfully reflects a view that was widely held by Herbert workers at that time, namely, that they were missing out on a local wages bonanza.

Transferrals of workers from neighbouring engineering factories to Herbert's - arranged at the behest of Ministry of Labour - must have reinforced this feeling on many occasions. There was, for example, the case of a worker, transferred from AWA's Bagington plant, who complained to the shop stewards that he had agreed to the move on the promise of a wage of over £6 and then found his pay was half that amount.** Perhaps more importantly, such cases also reminded the shop stewards of the weaknesses of their own organisation. For, on each occasion, the best they could do was negotiate for the worker's "release" (which management must have been happy to grant as it removed a potential militant from the plant).

In an earlier section to this chapter I tried to show that the newly-formed stewards' committee benefitted from a number of quick concessions. Then I argued that this happened chiefly because the issues had symbolic value (such as the question of smoking) or threatened a serious conflict with the unions - at a time when management was pushing for more and more production - and jeopardised the firm's standing within the local employers'

association (examples here could include such issues as the district toolroom rate or the Young Journeyman's Agreement). Subsequently, the stewards continued to "niggle" Herbert's "hard gaffers", winning minor concessions (mostly relating to working conditions) in a steady, unspectacular fashion. But on the issue of pay, management was adamant: it was a question of "patriotism".

By 1942, there was a resurgence in the shopfloor organisation. If Marston's account can be believed, largely through his efforts the AEU shop committee became a joint committee. But it did not yet possess the authority to centralise collective bargaining. Shepherd's logbook shows that the senior stewards of each union negotiated with management either separately or jointly according to the interests directly involved. (For example, Marston talked to the managers alone when he tried to raise the base rate of female pieceworkers.) In addition to the problems of organisation, the new arbitration system imposed by Government ruled out even the idea of negotiating higher pay across the plant. The combined effect of these circumstances was to encourage a form of sectional activity which challenged the politics of Herbert's variant of the gang system.

The challenge to the gang system: a tale of two stewards?

The story of the shopfloor challenge to Herbert's variant of the gang piecework system during 1942 is essentially a story of two section stewards: one located in the hardening shop; the other in the fitting bays. But their contest with managerial power had a wider relevance. It was one which demonstrated the character of state intervention through the shadowy presence of the National Arbitration Tribunal (NAT); highlighted some important features of the gang system; and provided a few hard lessons for trade unionists at Edgwick on the boundaries of factory politics and on the more covert techniques of managerial control.

The story begins with an apparently unrecorded dispute in the hardening shop. Piecing together the tale from Shepherd's logbook, it seems that in January the hardening shop gang complained about low piecework earnings and that, at the end of February, their grievance was heard at a Works Conference. From his notes, it seems that one outcome of the Conference was an agreement to re-time a job because, at a meeting on 4 March, one of the shop managers, Kelway, accused the section steward, Clarke, of encouraging his mates to take "*longer than necessary*" on that operation.¹⁰⁰

At the same meeting, Nixon (Horton's successor as works convenor) questioned Kelway on some aspects of rate-fixing: when was a worker entitled to have a job re-timed? Did the labourers' bonus affect piecework prices, and what effect did the presence of four women dilutees have on the gang rate? He also complained that

while Clarke had been blamed for all the troubles in the hardening shop, the fault lay with the chargehand and foreman. Kelway gave only the most general answers on rate-fixing and promised to "have a word" with the foreman about the "troubles" in the shop.

4 March marked a confused start for the stewards. While the senior AEU shop stewards seemed undecided on tactics - could they successfully challenge the "unco-operative" chargehand, or was it best to aim for marginal improvement in the piecework prices? - it was clear that Clarke had already made up his mind. The minutes of the shop stewards' committee held that evening recorded Clarke's report: "*feeling was running high*", he said, "*and the gang refused to work with (Game) in his present position as chargehand.*"¹⁰¹

Perhaps Clarke chose this rather 'adventurist' line because Game had suddenly fallen ill and been replaced temporarily by a more pliant chargehand. But, at any event, the ripples from the "troubles" in the hardening shop quickly spread across the plant and reached the chargehands' committee. In mid-March, its secretary approached Nixon with a proposal to convene a joint meeting of shop stewards and chargehands. It is not recorded what they wanted to discuss, but when the request was put to the shop stewards, they proposed two items for the agenda:

"1/ Definition of scope and responsibilities of Charge Hands

"2/ Definition of duties and responsibilities of Shop

Stewards.¹⁰²

In the last week of March, Game returned to work and immediately became the subject of a protest meeting. Despite Clarke's absence at that time, a delegation was quickly formed and despatched to inform the shop manager of the gang's refusal to accept Game back as chargehand. Kelway received the delegation and promised to investigate their allegation that Game had "robbed both the firm and the men"; but he also made it clear that he would not "submit to dictation from the gang". Instead, he persuaded the men to give the chargehand a month's trial.¹⁰³

Shepherd's lengthy account of the meeting is instructive for the impression it conveys of Kelway as a "hard gaffer" and, more importantly, for the insight it offers into the politics of Herbert's gang system. Shepherd's notes make it clear that while senior management knew of, and accepted, the chargehands' informal practice of keeping a kitty of bonus earnings, some pieceworkers were so ill-informed that they suspected they were being "robbed".

Kelway's success in stalling a decision on Game's future did not end the "troubles". Instead, once again, piecework prices became the focus of the gang's grievancies. On 26 March, the gang refused to do "certain lead pot jobs" which they considered to be priced too low. The news was relayed to management by the senior ARU stewards who, unaccompanied by Clarke, promised to get the

ban lifted if management agreed to a price review.¹⁰⁰ This was the first occasion Shepherd recorded this kind of industrial action, and it seemed to alarm the senior stewards almost as much as the managers. Next day, the senior stewards - this time accompanied by Clarke - argued for the gang's right to negotiate piecework prices. Not surprisingly, Kelway "emphatically" rejected this proposal. As he pointed out, it was an unprecedented demand since pieceworkers did not even have the right to know what prices their chargehands had accepted.¹⁰¹ (At a Works Conference held two years earlier, it was agreed that "any man has the right to know the time allowed for any job".¹⁰² Shepherd's notes also indicate that Kelway had stated the company's formal position. In practice, the managers and chargehands gave some details on prices, though at their discretion.) After a brief argument, the convenor registered a "failure to agree". It was predictable that, as a consequence of this impasse on piecework prices, the chargehand should become, once more, the subject of the gang's grievances.

On 30 March, Clarke led a 20 strong delegation to impress the shop manager with the gang's determination to remove Game. But the protest quickly crumbled. With little apparent difficulty, Kelway persuaded the workers to wait until the end of the "trial period" (still some three weeks away).¹⁰³ It was to prove the turning point in the hardening shop "troubles".

Two days earlier, Nixon and Warr suffered a similar humiliation

when they met the works manager, Lloyd, to complain at the privileges enjoyed by the chargehands' committee. Why, they asked, were the chargehands allowed to discuss their sectional interests during company time and in secret? In reply, Lloyd countered with his own complaint about the "considerable amount of lost time in the hardening shop owing to matters raised by the stewards";¹⁰⁰ and pointed out that, despite the absence of a closed shop, the stewards expected all the pieceworkers to bear the costs of their involvement in negotiations with the company. Lloyd adamantly refused to withdraw any of the chargehands' privileges, even though, by the end of the meeting, the stewards had scaled down their demands: no, he insisted, he would not ask the chargehands to disclose the agenda of their meetings.

On 1 April, the stewards received a letter from the AEU district organiser. The minute records his advice to apply for a Works Conference on piecework prices, and admonished the committee "not to let the hardening shop fight it alone". They resolved to convene a "special piecework stewards' meeting" to discuss this issue.¹⁰¹ But at the next meeting, on 15 April, only one reported on piecework prices in his section, and it seemed that the hardening shop was indeed being left to fight it alone.¹⁰² Meanwhile, Game's "trial period" was drawing to a close.

On 20 April, a small deputation from the hardening shop returned to Kelway's office. Significantly, the group was led by one of the gang members and not the section steward though he was

present. "Clarke and his associates", Shepherd noted, "were not at ease." Despite the fall in the gang's bonus - which Kelway attributed to time-wasting disputes - the men reported satisfaction with the chargehand. Shepherd observed that the militants had "lost any support they may have previously had on the gang." As if to confirm this point, Clarke informed the manager that he had applied to the National Service Officer for his release (which Kelway immediately endorsed).¹²¹

The explanation for Clarke's sudden and crushing loss of support is not immediately apparent from the records. However, Shepherd does provide one clue in his reference to the fall in the bonus payments. As I mentioned earlier, Kelway attributed this to disruption caused by the "dissatisfaction" in the shop. Yet, if the account of a then young rate-fixer who was sent into that shop at the end of March can be believed, the truth was very different.

Phil Barnes, the young man in question, recalls that he quickly realised the gang, including the section steward, had little idea of how their earnings were calculated. He also noted that their work generated a large number of piecework tickets each week. Given these facts, Barnes decided (apparently on his own volition though presumably with at least the tacit approval of his seniors) to bring matters to a head by secretly holding back a bunch of tickets each week; not enough to be noticed, but sufficient to cause a serious, cumulative effect on the gang's

earnings. When the workers realised, towards the end of April, that their monthly bonus was going to be considerably lower than normal, they blamed Clarke. After all these years, Phil can still remember the moment when he had to wait discreetly outside the hardening shop while the gang vented their collective anger and confusion on their section steward.¹²²

The deputation of 20 April effectively marked the end of the hardening shop disputes. Although it was a topic at several talks in the closing weeks of April, the issues were marginal and came to nothing. Clarke himself attended one more meeting with management and then vanished from the records.

The available documentary evidence suggest that in the months immediately following Clarke's "release", the managers successfully exploited his denouement as a lesson to others. Even by the autumn, when sectional activity began to revive, piecework disputes remained timid and infrequent affairs. In late September, for example, there was a complaint that a chargehand was running a gang from his sickbed and hoarding piecework tickets to improve the next month's balance; but management replied that they saw nothing wrong, or even unusual, in these practices.¹²³ So the matter was dropped.

The campaign to challenge the power of the chargehands' committee also dwindled away to nothing. In August, after months of prevarication, representatives of the committee finally met the

senior stewards and members of the AEU district committee. No records of that encounter are available, except for a brief reference in the stewards' minutes which indicates a certain amount of frustration on their part: the chargehands were advised "to put themselves in order first by joining the union"¹¹⁴

When the news of the NAT's decision on piecework bargaining, Award 249, reached the stewards on 21 September, it contained no surprises. The Tribunal found that while a gang had no right to negotiate prices, they were entitled to know the prices accepted by the chargehand on their behalf. This was no more than the unions had secured in 1940 and were offered again in May 1942, and probably did no more than formalise the status quo for some of the better organised gangs at Edgwick. As Tolliday observed in the case of Ford's stubborn resistance to the unionisation of its Dagenham plant, Award 249 "illuminates how little pressure the Government was prepared to exert in a context where the unions did not prove able to help themselves".¹¹⁵

Earlier, I had attributed Clarke's fall to the wiles of a rate-fixer. But, of course, the success of Barnes' dirty tricks only begs the question: why did the gang turn on their section steward and not the chargehand? One answer may be that Clarke simply presented a more vulnerable target for his mates' anger; that he was simply the victim of scapegoating. But that is not a sufficient explanation. It also has to be said that Clarke appeared to make himself especially vulnerable because of his

relative adventurism. Encouraged by the powerful sense of grievance in his gang (perhaps it is worth mentioning here that the working conditions in this shop were particularly arduous and that since it was a relatively new section, its semi-skilled workforce would have responded to the situation without the weight of tradition on their backs), Clarke apparently decided to organise his work mates around objectives which, in the context of factory politics at Herbert's, represented a radical challenge to managerial authority on the shopfloor. Equally important, he ignored the dangers of his growing estrangement from the other shop stewards - particularly the senior AEU stewards - who chose more circumspect tactics. I would suggest that it was Clarke's evident isolation which probably tempted one of the most junior members of management, a rate-fixer, to set him up.

When Clarke left that summer, he would not have been consoled with the thought that he had reminded other activists of some basic lessons in factory politics; but it is evident that Williams, one of seven AEU stewards in the fitting shop, was careful to avoid Clarke's mistakes.

If Williams shared Clarke's readiness to use industrial action to pursue his objectives, he was unlike Clarke in the care he took to select grievances that were within, or on, the boundary of the possible at Herbert's. He was similarly cautious in his approach to the other lay and full-time officials in his union. In the remaining months of 1942, Williams probably caused

management as much concern as did Clarke earlier that year;¹¹⁶ but he was not isolated and obliged to seek his "release".

In November, Williams was accompanied by three senior stewards - Warr (the new convenor), Spinner and Marston - when he complained to Lloyd, the works director, about "bulk prices". The subject had been raised some weeks before by a gang of toolroom workers and, as before, the managers explained that over the years chargehands and rate-fixers had found it convenient to negotiate one price, a 'bulk price', for a series of operations such as erecting a machine. Unlike the toolroom workers, Williams was not satisfied with this explanation and the managers agreed to price all new jobs on an individual basis.¹¹⁷

On 8 December, Williams, this time accompanied by the convenor, claimed the right to be informed of all the pay data communicated to the chargehands in the monthly summary sheets. After hurried consultations with senior management, Shepherd conceded this claim.¹¹⁸ However, there is an important qualification to be made to this 'victory': the concession did not include details on how the gang's bonus was divided between members of the gang; Warr agreed that this element of a pieceworker's earnings was a personal matter.¹¹⁹ (As you may recall from my earlier description of the gang system, the size of a worker's entitlement to a share of the gang bonus was determined by his or her base rate plus any discretionary awards.)

At the end of December, Williams informed management that a gang on his section had decided to leave a particular job "on the floor" until offered a better price. Not only did Williams make this statement in the presence of his senior stewards, but he had done so after securing the "moral support" of the shop committee on this issue.¹⁷⁰ This was the first record of industrial action at Edgwick since the hardening shop "troubles" (and only the second occasion for this kind of tactic to be mentioned in Shepherd's diary). But, unlike in Clarke's campaign, the senior stewards could not intervene and lift the ban. Consequently, the managers were forced to concede the claim early in the New Year.

Pieceworkers' base rates and the limits of change

Alongside efforts to increase pay by challenging the politics of the gang system, the section stewards in the fitting shop tried another, more direct means to raise pay at Edgwick, namely, by pushing for an increase in pieceworkers' base rates.

The matter was first raised at a shop stewards' meeting in May and advice sought from the district committee. But it was not until September when, with the DC's approval, they decided to convene a district-wide meeting of machine tool fitters. That meeting, due to be held on 15 October, collapsed through the indifference shown by the other convenors. And it was not until 30 December when the shop stewards finally approached management.

Shepherd's notes of those talks illuminate not only management's "tough" stance on pay issues, they also show how ready the managers were to debunk the myth of Herbert "craftsmanship" when it suited their purpose. For example, in one passage Shepherd recorded his own retort to the stewards' arguments that the exceptional abilities of Herbert's skilled employees deserved higher remuneration:

*"In reply I stated that we had several women on skilled work both (sic) in Fitting Department, on die-heads, and on machinery."*²²²

In the absence of any kind of pressure through industrial action, the negotiations dragged on without any progress until 4 January 1943 when Lloyd put the matter to rest (for the moment) by pointing out that the higher earnings of fitters elsewhere in Coventry were due to higher piecework earnings and not higher base rates. In the circumstances the shop stewards must have felt that this was a gratuitous insult. As a compromise, Lloyd offered the only kind of pay increase that was possible within Herbert's "patriotic" wages policy: individual merit awards. Though the stewards "intimated" they might consider "certain steps" as a result of their "disappointment", the offer was accepted eventually.²²³

Despite all this, there was a wage drift of sorts at Herbert's. While management held the line on the actual piecework prices,

their "liberalism" on claims eventually led to a situation where, at the end of the War, they made up some 40% of wages for at least one group of pieceworkers.¹²² However, as management's records make explicit, in the first instance this drift was a conscious response to the flight of workers to other, better-paying firms; later, as EWO regulations largely prevented the free movement of labour, I would suggest that the wage drift continued in a more insidious way as the managers tried to buy workers' co-operation for more production. The records offer very little evidence to support the argument that collective action on the shopfloor had other than a marginal impact on management's pay policies. To explain why this was the case I believe Tolliday's observations are apposite.

In his revision of the conventional periodisation of the development of shopfloor organisation in the British motor industry, Tolliday argues that the attempt to generalise from the cases of Standard Motors and some of the smaller motor firms in and around Coventry has resulted in a very misleading picture. He claims that despite conditions that favoured union development during the War - the drive for production, tight labour markets, growing union confidence and government policies which tended to mitigate employer hostility, such as cost-plus contracts and the priority given to conciliation - the advances that took place in the motor industry, especially in what he called the "core motor factories", were "restricted and partial".¹²³ In his explanation of this paradox, Tolliday draws attention to circumstances which

can be directly compared to the situation that existed at Herbert's.

In common with Tolliday's "core motor factories", Edgwick was an established plant, not a shadow factory, with a workforce largely inured to the factory politics of the 1930s. Similarly, Edgwick's product line and production techniques, largely unchanged from the pre-war years, denied the opportunity for aggressive piecework bargaining. To this I would add that management at Herbert's was jealous of its authority on the shopfloor and most certainly not prepared to concede shopfloor controls and grant high wages in return for higher productivity. Finally, as mentioned earlier, the Government pursued a manpower policy which effectively excluded any radical state intervention in those situations where, as Tolliday put it, the unions were too weak to help themselves.

Experimenting with individual piecework

In the previous chapter I argued that the political dynamics of the gang system created a hostile terrain for the development of the shop stewards' organisation, so it is worth commenting on the fragmentary evidence which indicates that, during 1942, management tried to introduce an individual piecework payment system (IPW).

The hardening shop "troubles" and the potentially more challenging activities of the fitters may have contributed to management's decision to experiment with IPW; but it seems that the main impetus for change was the byzantine character of the gang system itself. With its arbitrary rules and ad-hoc agreements, it had created a costing system which could not be replicated elsewhere - not even at Herbert's own "dispersal factories".¹²² However, it appears that the managers were not encouraged by the results of the experiment. When they introduced IPW at No3 Factory (Exhall) at the beginning of December, they quickly encountered shopfloor resistance which persuaded them to restrict the system to sections of female labour.¹²³

(Unfortunately, the union records provide no explanation for this resistance, though it is likely that it was sparked off by the activities of the rate-fixers.) Perhaps more importantly, complaints about the rise in scrap rates made it clear that, unless a well-established policy was reversed and more money spent on inspection, any hoped-for benefits of the system could be quickly nullified. In addition, the managers must have been conscious of Sir Alfred's reluctance to abandon the gang system - a reluctance made explicit three years later when the experiment was resumed with greater determination.¹²⁴

In the previous section of this chapter I tried to explain in some detail how, despite their early successes in the 1930s, Herbert's stewards were still marginalised in the piecework bargaining process in 1942, a time when the shopfloor organisation was approaching its wartime peak. If this account provided the only insight into the shopfloor organisation at Edgwick, it would evoke a dismal view indeed and, more importantly, it would seriously misrepresent the character of factory politics at Herbert's during the war. The managers were certainly "hard gaffers", as one worker described them, but their response to the stewards' activities could not be simply characterised as repressive.

Earlier, I had mentioned management's "liberal" attitude to claims under the piecework system as a means of raising pay without abandoning the structure of pre-war prices. This same "liberalism" extended to the shop stewards, as Tom Batchelor recalled:

"Stewards hadn't used to be paid for trade union business. What happened was when you worked on a gang, you got your money out of the gang. Of course, if you were away a long time, then the people in your gang used to start grumbling...Well, there was ways and means of - but you've got that (tape recorder) going and I wouldn't like to say; but if you erase what I tell you - you see, what happened was if you were away a long time and it was important to the

gang, then the chargehand used to go to the foreman and say: 'Look, Bill's been away two or three hours here, working on this, or working on that.' And he'd say: 'Well, alright, book some extra sets.'

I would suggest that the purpose of these seemingly covert arrangements was to make the stewards feel a strong sense of obligation to firstline management and so, indirectly, draw them into their employer's patronage. Shepherd's notes suggest other ways in which management could have patronised the stewards. Over a wide range of issues - usually over relatively marginal questions such as working conditions which were also congruent with Sir Alfred's self-image as a caring, Christian employer, or questions such as the registration of dilutees which exposed management to "third-party scrutiny" - the managers demonstrated a readiness to accomodate the unions. As I have shown already, the entries in Shepherd's logbooks - typically where they deal with more central issues relating to managerial authority and some aspects of pay - also contain abundant illustrations of Herbert managers as "tough gaffers"; but the point is that contradictory forms of subordination, accomodation and repression, have to be brought together to construct a more representative image of factory politics at Herbert's in 1942.

No Stakhanovites at Edgwick - not exactly.

For the first years of the war, it is possible to discuss labour relations at Edgwick without any reference to the politics of the War itself. As I mentioned earlier, when an anti-Communist hysteria swept through the country and provided the excuse for the victimisation of hundreds of union militants, there is no evidence that any union activists were dismissed by Herbert's. The War was, in that sense, an external event which impinged on factory politics at Edgwick but was not part of it. In 1942 this relationship was radically altered and the politics of the War merged with the politics of work. During that year the 'People's War' was at its height and, as Croucher put it, "a red haze" settled over British politics. In engineering factories across the country, the Communist Party was able to establish a political base (and its largest ever membership), Hinton claims, by successfully channelling working class hostility towards the bosses into a political campaign for a more vigorous war effort.¹²⁸ Herbert's, too, was shrouded in this "red haze"; but the stewards' stance on discipline and their motives for joining the campaign for Joint Production Committees were, as I hope to show in the following pages, rather more mixed than some accounts of the period would suggest.

There is evidence that, to some degree, the stewards supported the drive for more production as part of the war effort. For example, on one occasion, the convenor and a section steward

informed management that two men in the experimental department were poor time-keepers and "not pulling their weight in the gang".¹²⁹ (Incidentally, the AEU district committee not only approved this action, they asked to be kept informed of the conduct of the two culprits.) At another time, the senior stewards felt it necessary to remind one manager that they had intervened in several disputes to prevent stoppages.¹³⁰ (This may have been their wish rather than the practice in every instance; but it was a significant statement for all that.) On another occasion, the managers were able to use the stewards' concern for discipline by trying to get them to police their colleagues. Shepherd's minute reads:

*"Spinner (an AEU senior steward - KG) said men were complaining bitterly regarding notice to close the shops during meal intervals (Note. This was due to damage to work caused during meal times) After consulting Mr Lloyd it was decided to withdraw the notice and stewards were asked for their influence to be used to discourage such action as is likely to cause damage."*¹³¹

But they were no Stakhanovites, not exactly. Unlike Arthur Excell and his comrades at Morris Motors, they formed no shock brigades;¹³² nor did they try to persuade colleagues to abandon custom and practice in any other ways to achieve greater productivity. On the contrary, during 1942 the senior stewards negotiated a cut in working hours (the agreement gave "good timekeepers" Saturday afternoon off once a fortnight); obtained a

"5 min early finishing for women"; and they complained when workers were suspended for minor infringements of discipline such as their presence in the canteen at "unauthorised times", and objected when a foreman told an apprentice that his work would have been treated as "sabotage in the occupied countries".¹²³

On a number of occasions during 1942, the stewards complained when work was disrupted as a result of material shortages or production bottlenecks. However, it is not clear if their complaints were motivated by their members' pecuniary worries or a patriotic concern over the war effort (or a combination of both). All that can be said is that, again unlike some workers elsewhere at that time,¹²⁴ there is no evidence to suggest that they ever accused the managers of deliberately sabotaging the war effort or tried in any way to discredit the managers' competence - least of all to secure popular support for a JPC. But then, good reasons for this lay in the character of Herbert management.

In May 1940, Herbert himself had talked about the "scandal of idle machines". In an article, which was, in essence, a call for full night-shift working in engineering factories across the country, he claimed that:

"Ever since the beginning of the war I have been a voice crying in the wilderness, trying...to rouse public opinion to the need for sweeping away all peacetime restrictions, whether imposed by the Home Office or the Trade Unions, so that the full use should be made of the only available

labour, of which thousands still remain unemployed."¹²⁸

He concluded with a rhetoric that Communist militants would not have been ashamed to use just one year later:¹²⁹

*"If Government had known the fine qualities of our workers as I know them they would have said - this is a time for sacrifice and for service to the full and I know the sacrifices would have been made willingly and joyfully just as indeed they are being made now at this eleventh hour."*¹³⁰

As I hope I have shown, Sir Alfred was not slow in calling for such "sacrifices" from his own employees. However, the "fine qualities" of his workers did not persuade him to let them share in the government of his factories.

The JPC 'campaign'

Nationally, the campaign for Joint Production Committees gathered momentum in the summer of 1941, immediately after the Nazi invasion of Russia. Despite this, engineering employers, both nationally and locally, kept up a fierce resistance for many months. In Coventry, it was not until March 1942, after Standard first broke rank, that JPCs got well under way.¹³¹ Not surprisingly, the same issue was not raised at Herbert's until late March - in the train of the local successes. When management's initial response came in April it was not encouraging.

Lloyd did not dismiss the proposal out of hand. He argued that, while he accepted JPCs in principle, at Herbert's the works' suggestion box was "an existing, satisfactory machinery" for consultation. He added the observation that there was a widespread "reluctance (among Herbert's employees to)...disclose information to production engineers" which convinced him that the flow of information would be one way at a JPC. "Many men", he said, "appeared to have no faith in management." (Needless to say, these frank remarks were never expressed in the *Alfred Herbert News*. They were hardly compatible with the myth of the "Herbert Spirit".) Marston, the TGWU's senior steward, countered with the opinion that "the men would give more support to production speed-up if (they) were represented on the Committee."³⁰ When the subject was debated again, on 25 April, Warr elaborated on that theme by providing a few ideas on how to improve production.³¹ This may have been sufficient encouragement for the managers - though I suspect they were more persuaded by the possibility of arbitration³² - for, on 18 May, Lloyd tabled the constitution for a JPC. But this victory, ostensibly based on productionist arguments, carried its own cost as the shop stewards quickly discovered. When they complained about the low attendance payments, Lloyd answered that if the JPC achieved the kind of productivity gains they claimed then its representatives would soon be compensated by higher piecework earnings.³³ Subsequently, the unions encountered other incidents which signalled management's opposition to this new partnership

with labour.

In June, on the eve of the first elections, the managers tried to put a safe man on the Committee and only relented when the shop stewards made it clear they would take the matter through the disputes procedure. On one occasion, in October, a JPC rep' was peremptorily ordered off a section.¹⁴³ A month later, when the convenor raised a question about representation of the Exhall plant, Shepherd replied that management would not accept an additional representative, "nor was it thought necessary that there should be a separate JPC for Exhall as this would mean another half day's time wasted."¹⁴⁴

Much later, Sir Alfred himself made clear that his opposition to JPCs was based on strong, ideological grounds. In February 1943, the *Daily Telegraph* published a letter in which he complained of the attempt by the Labour and Communist parties to "distract our minds by a series of attacks on our most tried and valued institutions." The focus of Sir Alfred's attack was the newly-published Beveridge Report; but he had these comments to make on JPCs:

*"Even the Joint Committees, which industry has been forced to accept, approach very closely in many aspects to Soviets, and are continually seeking to usurp more and more of the true functions of management."*¹⁴⁵

Given these varying levels of managerial opposition, the stewards

at Herbert's - contrary to Arthur Excell's experience at Morris Motors - were never in any danger of being incorporated into the drive for the war effort through the JPC. Instead, the few fragmentary references in the minute books suggest that the stewards more frequently used the committee as a means to pursue objectives other than increased productivity.

In essence, it seems that the stewards tried to use the JPC as another forum for collective bargaining and a means of raising the status and authority of the shop stewards' organisation. Initially, some stewards appeared prepared to test the limits of that new authority on the shopfloor. This is certainly suggested in the quarrel I mentioned earlier, which ensued after one JPC representative was ordered off a section by front-line management because he had failed to "have a word in the office" before his visit.¹⁴⁴ But this was an isolated dispute and it seems that the JPC quickly settled down to its more modest role as an adjunct to the centralised, collective bargaining process. For example, the minutes for the shop committee meeting on 21 July 1943 contain this reference to JPC business:

"Matters referred to at last meeting were Ventilation which the firm promised to improve"

"Working hours Firm stated that there could be no reduction under the present hours which were fixed by Min. of Labour."

Similarly, in February 1944, the shop committee accepted a recommendation from the AEU's District Secretary that the JPC be asked to consider the complaint that the canteen had stopped "the

sale of tea and cakes to none but those living in Hostels".¹⁴⁷

Possibly like many others in Coventry, the JPC at Edgwick quietly faded away. As the last reference to it in the minute books is dated 23 February 1944, this suggests that the committee met barely 20 times. Its silent demise could have been the product of several factors: management's hostility; workers' disappointments at its minimal achievements; and the onset of redundancies as war production slackened and rendered the committee obsolete.

Hinton has argued that, once established, JPCs "did more to contain than advance working class pressure on the frontier of control in the workplace".¹⁴⁸ This may have been the case in the aircraft factories or in plants re-fitted for war production; but I would suggest that elsewhere in the engineering industry, particularly in workplaces like Herbert's, where product and technique remained essentially unchanged, JPCs can hardly be said to have been constraining and may even have made a modest contribution to "working class pressure on the frontier of control".

'Red days' at Herbert's?

The year of 1942 was, Croucher claims, "the heyday of the Communist engineer".¹⁴⁹ From the previous summer until the end of

the 1942, a "red haze" settled over British politics. Membership of the Party peaked at 56,000, and at the beginning of 1943, he claimed, it had 33 factory branches in Coventry alone. Croucher explains that the Communist Party's popularity was, in part, a reflection of the very broad support for the Soviet Union, then engaged in a stubborn resistance to the Nazi invasion. The CP also gained strength through the success of the campaign for JPCs; a campaign led by Communist engineers. Lastly, Croucher argues, it was not coincidental that the period between the summer of 1941 and the end of 1942 was one in which skilled labour was "diluted up to almost the wartime maximum".¹⁰⁰ However, the little information available suggests that the "red haze" which settled over Edgwick may have concealed rather more than it revealed of the character of factory politics at Herbert's.

The stewards' support for the Coventry Anglo-Soviet Unity Committee is on record and,¹⁰¹ on one occasion, their enthusiasm for the Soviet Union prompted them to support the proposal that £500 from the local Air Raid Distress Fund should go to the appeal for medical aid to Russia;¹⁰² an idea which was later rejected by the ARDF Committee itself. But this identification with the Soviet Union's struggle should not be interpreted as a sign of their political alignment with Russia. It is important to bear in mind that, despite the "tireless attendance of the local Communists",¹⁰³ the Anglo-Soviet Committee was a popular, and not a class-based, organisation. Formed on the initiative of men like

Alderman Sidney Stringer, George Briggs and George Hodgkinson, the Committee attracted attendance from the local ERA, the Chamber of Commerce, the WEA, the BMA and local councillors.

Hinton asserts that in 1942 the CP had "a significant presence" in 40 Coventry factories, "including all the larger ones". The phrase "significant presence" suggests that Communist militants were influential in shaping the politics of the shop committees in all those plants. But the evidence from the Herbert case study does not support this claim. In the oral testimony of former workers and managers, there is nothing to suggest that Communists enjoyed even a marginal presence in shopfloor politics at Edgwick; and in the stewards' minutes, the evidence indicates that, if anything, shopfloor politics had shifted to the right by 1942.

You may recall that in the late 1930s, Bert Horton, Edgwick's first AEU convenor, supported Popular Front politics with considerable enthusiasm; and that, in one instance, this was endorsed by the other stewards when they barred a fascist activist from membership of the AEU. But in 1942, the new senior stewards who had replaced Bert - and the other early activists who quit Herbert's at the beginning of the War - were very different. For example, on 12 August, at about the time when the DC was pressing its convenors to organise "mass meetings" on the question of the delayed Second Front, the shop committee at Edgwick decided to write to the DC to protest at bi-monthly

district meetings "being used for other things than union business" - right-wing Labour's customary oblique reference to political debate.²²² Similarly, the Trades Council's invitation to attend a meeting on "Women in Industry" was simply noted without comment in the minute books. In themselves, these fragments do not clearly establish the political character of the shop committee; but, given the absence of any minuted debates on left-wing politics, they suggest that during Britain's and Coventry's "red" days, right-wing Labourist politics were dominant at Edgwick.

If these observations are accepted, then I would also suggest that there is a need to revise the conventional account of Coventry's industrial politics during those 'red days'. The best descriptions of that period come from Croucher and Hinton; but both writers were rather more concerned with following the shifts in the fortunes of the CP (and correlating them with changes in the class character of its policies) than in trying to characterise factory politics in engineering shops across the city. This, I believe, is particularly true in Hinton's case. He provides an uncritical account of the CP's early successes because he is concerned with making a point about the Party's politics and how its abandonment of class-based policies in the closing years of the War was largely responsible for its similarly rapid decline. Hence, both writers talk of the CP's dominance of the AEU District Committee and the "entrenched opposition of a well-organised right-wing leadership" without

explaining the latter's survival.¹⁰⁰ Was it simply a question of fixing the organisation, as Hinton's phrase implies, or was there a political base for that opposition within the local engineering factories? I would suggest that shopfloor organisations such as that at Edgwick provided a durable political base for the union officials.

Women at Herbert's

Another major theme in both Tolliday's and Croucher's accounts of the engineering industry during the War is the political impact of the presence of female dilutees. The available material on Herbert's in 1942 is too thin to explore this theme here in all but a summary fashion.

The evidence suggests that it was an unexceptional year for women workers at Herbert's. They were infrequently mentioned in the records of either the shop committee or management, and in those rare references they usually embodied long-standing problems for both sides. The "two girls at Exhall", who put their hats on five minutes before time, were one more illustration of the disciplinary problems women posed for management; and in October, when the shop stewards were asked if their members would continue to oppose the extension of "women in the toolroom",¹⁰¹ they were reminded of the role of women workers as an instrument of

dilution and as a threat to the skilled status of male workers.

I would argue that it is possible to exaggerate women's contribution to the plant's disciplinary problems. They may have found it difficult to accommodate themselves to the long hours of repetitive, tedious labour that were expected of them; but it appears that their resistance was confined to an absenteeism which was identified as a major problem with married women. However, at a very early date the managers themselves recognised this was largely due to the pressures of domestic labour.¹⁸⁷ In the following year the records detail some minor breaches of discipline at work such as getting ready for home early (mentioned earlier) or extending the work breaks by a few minutes;¹⁸⁸ but, there is nothing to indicate management ever felt inclined to emulate Morris Motors and encourage the unionisation of women as a means of controlling them, or even to ask the stewards to "use their influence" for that purpose (as they did when it came to disciplining other sections of the workforce).¹⁸⁹

Similarly, I would also suggest that it is possible to exaggerate the role of women as dilutees at Herbert's. Labour force statistics, fragmentary though they are, suggest that, despite the early introduction of female dilutees, by 1940 women still constituted a relatively small proportion (perhaps 10%) of the workforce at Edgwick.¹⁹⁰ Their presence in the toolroom, the AEU's stronghold, may have sent shock waves through the Union and

constituted a major grievance throughout the War; but there is no evidence to suggest management was able to exploit them successfully as a means of de-skilling craft work. Instead, I would argue that it was much more a reflection of the heterogeneous character of work in that section.

If women workers did not pose any substantial problems for the shopfloor organisation - either as reluctant conscripts to the war effort or as dilutees - it seems that the shop stewards' response to women's grievances was minimal and patronising. For example, they negotiated a five-minute early finish for women and in the following year they also persuaded management to hire the services of a hairdresser for the night-shift - a concession quickly withdrawn because of lack of trade.¹⁴¹ Also in 1943, the TGWU stewards raised a grievance about the low pay rates of women on gang piecework. Marston complained that women's piecework bonuses were calculated on a base rate of 16/- when it should have been nine shillings more. Management asked him to await the outcome of a Works Conference on the same dispute at Standard Motors; but he was also told that "to use (the higher base rate) for gangs would mean that the women would benefit at the expense of the men".¹⁴² Though the records are ambiguous, it seems the Union accepted the status quo "until such time as individual piecework is extended" to all women workers.¹⁴³

Surviving the Peace: 1944-49

As early as October 1943, the peak year of production, senior management began discussions with government officials on "substantial reductions of output".¹⁰⁰ These meetings probably deepened the managers' fears of a repetition of the depression that followed the First World War.¹⁰¹ However, the evidence indicates that relatively few jobs were lost at Edgwick, and six months after the War management and unions had to cope with the consequences of a quite unexpected problem: chronic labour shortages.

The fragmentary statistics available suggest that between July 1944 and February 1946, there was a small but steady loss of jobs at the main works. From 5518 in July 1944, the labour force dwindled to 4686 in November 1945 (a monthly job-loss of 52), and to 4429 by February 1946.¹⁰² In those last four months, the rate of job-losses had accelerated to 64 per month; but this may have been due to the lifting of the EWO regulations and the consequent, voluntary flight of labour from Herbert's. The financial data does not exactly match these trends. The fact that the costs of "net shop labour" in May 1945 were 33% lower than the monthly average for 1943-44 suggests that many more workers left Herbert's before the conclusion of the War;¹⁰³ but this discrepancy may be explained by the redundancies at the dispersal factories at Cosby and Earl Shilton. By January 1946, all production had ceased at Cosby and some of the plant removed from

Earl Shilton, its closure only delayed by the lack of space at a newly-acquired site on Red Lane, Coventry.³³³ (Expansion also took place at Exhall to accommodate the work from Cosby;³³⁴ but there is no other information on redundancies at that or at the Lutterworth plant which was also retained by Herbert's. Similarly, there is no information on the fate of the plants at Warwick and Glasgow.]

No labour force statistics are available for the remaining years of the 1940s; but the absence of any reference to redundancies in management's records, or in the shop stewards' minutes, after January 1946 shows that redundancies were not an issue for either side from that date, and lends support to the view that if any job-losses took place at Edgwick at all they were few in number. This relatively uneventful transition to peacetime production was probably due to two factors: first, apart from some warning signs of a conservatism in both product design and technique,³³⁵ management did not need to change either of these to accommodate the post-war markets; second, (and clearly related to the first) defence orders continued to provide Herbert's with a substantial buffer against "normal, commercial conditions" throughout the 1940s. Two other features of the war-related redundancies at Edgwick are worth commenting on here: they were applied unevenly and they were complex in origin.

In some sections of the machine shop, individual workers were being made redundant, following a decline in orders, as early as

June 1944.¹⁷¹ A year later, a chronic shortage of labour in the foundry - where it was calculated that output could be increased 40% - prompted management to put in a request for Italian war prisoners on one occasion.¹⁷² There is also evidence that the managers went to some trouble to retain skilled workers at the expense of other grades,¹⁷³ and tried to substitute women workers for semi-skilled, male operators.¹⁷⁴

The causes of the cutbacks were similarly complex. Despite warnings about "substantial reductions" in orders, this factor seems to have had a marginal impact on jobs at Edgwick. Instead, at the beginning of 1944, management forecast reductions in output as a consequence of the conscription of workers for the Second Front,¹⁷⁵ and these 'redundancies' took their toll at a steady rate throughout the closing years of the War. Further, it appears that other redundancies were caused by something management had not anticipated (or perhaps refused to discuss): war weariness.

In August 1945, the finance director complained that, while orders were higher than in the previous six months, the value of production had fallen by 46% during the same period.¹⁷⁶ This decline was left unexplained; but its effects could not be ignored. Six months later, Sir Alfred complained of "having to reduce our fitters because the supply of work for them from the Foundry and Machine Shop is insufficient".¹⁷⁷ I attribute much of management's difficulties in this area to a kind of war weariness

for what are perhaps the obvious reasons. Many workers had experienced "excessive and systematic overtime" at Edgwick since the late 1930s (some even earlier than that); for the most part their work was repetitive but demanding; many employees (not just the women) felt they were Herbert's conscripts; and yet, despite all this, disciplinary problems were raised relatively infrequently. If the workers at Herbert's were not Stakhanovites exactly, they had made their own kind of contribution to the war effort. Now that the hostilities in Europe were coming to an end, many employees were no longer prepared to continue making the same sacrifices. I would suggest that evidence of this attitude is contained in one minute which recorded a director's observation, in August 1945, that while he had resorted to using overtime in the machine shop to balance work across the plant, "our workpeople do not like it".¹⁷⁶ However, I would not argue that war weariness was the only reason for opposition to overtime during that period. Some machinists must also have resented management's refusal to countenance the unions' request to cut the working week to 52 hours while colleagues were being made redundant.¹⁷⁷

From a very early date, possibly the first months of 1946, the documentary evidence suggests that management became far more concerned about how to recruit and retain labour - especially skilled labour - than with redundancies. As I indicated earlier, it seems that, initially, this problem was localised around a few sections, notably the foundry; but oral testimony, and references

in the stewards' minutes (which record instances of the voluntary departure of section stewards and complaints about low gang rates in the machine shop which arose from a high turnover of labour) suggest that labour shortages became more widespread very quickly. One immediate response to these difficulties was to increase overtime despite its unpopularity with the shopfloor at that time; another was an attempt to expand the night-shift - which the managers recognised as even more unpopular;¹⁸⁰ and a third remedy was to retain some female dilutees. However, it seems that, to some extent before the conclusion of the War, management had anticipated the flight of skilled labour from the plant after de-regulation and took steps to develop a longer-term response, namely, reform the piecework payment systems.

One reform was the changeover from a monthly to a weekly bonus system which was phased in from the end of 1945. However, the principal change was the move to scrap the gang piecework system and re-introduce the experiment with IPW. As mentioned earlier, the first attempt had ended very quickly for reasons not entirely clear from the records. This second attempt was more successful and its initial progress rapid. Commenced shortly before the end of the War, it appears that by October 1945, the Exhall plant and all female piece-workers at the main works had moved onto IPW.¹⁸¹ However, this pace was suddenly lost when management extended the new payment system to gangs of male piece-workers at Edgwick. The stewards' minutes suggest that it took a full year to put the first section, Bar Lathes, onto IPW;¹⁸² Surface Grinding followed

in January 1947 and Factory Bar Lathe later that same year;¹²³ the changeover for the Chucking section did not take place until February 1949.¹²⁴ The available records provide no further details on the extension of individual piecework, so I cannot say whether it eventually covered the all pieceworkers in the machine shop. It is clear, however, that management made no attempt to extend IPW to the fitting shop. The story suggested by these scattered references is supported by the recollection of Bernard Wall, one of the few rate-fixers involved in re-timing jobs for IPW during those years. He recalled an occasion at the end of the 1960s when a consultant told a works meeting that he would "put Edgwick on a proper basis" in rather less time:

"And this Jimmy Houston, he stood up and said: 'I'm going to do the whole lot in three months.' Well, it had took us about three years to do one bay. We laughed; we actually laughed at his face! So ridiculous!"

I suggested earlier that the re-introduction of IPW was part of a response to labour shortages. However, minutes of the directors' debates suggests that the senior managers hoped to fulfil a number of objectives through individual piecework, some of which were contradictory and reflected conflicting interests within management.

There appears to have been unanimity on the need to rationalise the payment system, that is, investigate piecework prices "very thoroughly" and "re-consider" the Rate Fixing Department.¹²⁵ The

policy of maintaining pre-war job-prices in a period of wage-inflation had produced a situation in which, in Sir Alfred's words, "it was impossible to get work done by what I call legitimate piece-work"; piecework had become "merely day work plus a bonus".¹⁰⁰ However, these were not new discoveries for senior management. In the early years of the War, it was known that the gang system had produced a costing system which was untransferable either to Herbert's sub-contractors or even its own dispersal plants. What were new reasons and gave management sufficient incentive to abandon gang piecework were: firstly, the increasing pressure from women workers for a more equitable piecework bonus system (which, as the managers themselves had insisted in earlier talks with the unions, would only be achieved through transfers to individual piecework); secondly, the anticipated labour drain after de-regulation; and, lastly, the need for economies in response to the austerities of the post-war world. Not surprisingly, differences emerged within management, especially over these last two issues. While the finance manager gave priority to the drive to eliminate the "excessive claims", the covert "subsidies"¹⁰¹ 'suddenly' discovered within the old payment systems, one production manager expressed an enthusiasm for higher piecework prices (as the means of achieving higher productivity),¹⁰² and another appeared positively sanguine over the prospect of employing more works staff as a consequence of the change-over to IPW.¹⁰³ There were also differences over the pace of change: the production managers were keen to report progress; but others, notably Sir Alfred, called for

"moderation".

These points of consensus and conflict help to explain the uneven progress of IPW at Edgwick. Progress was rapid in women's piecework gangs because, I would suggest, change could be obtained cheaply: the new prices and supervisory costs would have been relatively low. It was a bonus for management that the new payment system could also be presented to the women as the solution to their grievancies over the iniquitous division of the gang bonus. Following this logic, it could be said that the remarkably slow spread of IPW among male pieceworkers - despite the fact that the pay system was tested out with gangs of semi-skilled machinists first who, presumably, had relatively little power to manipulate events in their favour - was largely a consequence of an internal, managerial conflict, a reluctance by important sections of management (including the "Sole Governing Director") to endorse an approach which required higher job prices and an expansion of supervisory staff.

The same tangle of conflicting objectives is evident in management's attitude towards the workplace organisation at Edgwick. In a variety of ways, the senior managers made it clear that the state-sponsored corporatism of the 'People's War' was at an end. At the first opportunity, the stewards were informed they would no longer be paid for their time while on trade union business.³⁰⁰ In January 1946, and again in June that same year, several prominent stewards were dismissed in circumstances which

suggested they had been "victimised" for their trade union activities.¹³³ Then in May that year, the convenor was obliged to go onto the night-shift for five weeks.¹³⁴ This new attitude to the shop committee was also reflected in a host of less direct ways. For example, in August, management re-introduced "pre-war practices" on the treatment of late arrivals without any prior consultation with the unions.¹³⁵ However, management's counter-offensive did not amount to an attempt to smash the shopfloor organisation. Instead, it seems that the senior managers tolerated its continued existence for two reasons. Firstly, there was no real need to do otherwise: past or present, the stewards' committee at Edgwick was not a major threat to managerial power on the shopfloor. Secondly, as I explained before, the transition to peacetime production at Edgwick was relatively uneventful. In contrast to Austin's aero works, Radiator's subsidiary where Arthur Excell worked, or Morris' Metal Produce Recovery Department at Cowley where peacetime conditions obliged managers to close units or radically transform their product-line, Herbert's management faced a product market that encouraged them to keep disruption to a minimum. In this context, it is easy to imagine the managers calculated that a drive to smash the shopfloor organisation could become counter-productive. It risked a further decline in productivity, an increase in the flow of skilled labour from the plant, and deprived management of one (albeit unreliable) gauge of workers' attitudes. (I would suggest that broadly similar circumstances persuaded other engineering employers in Coventry to temper their

offensive against the unions during the transition to peacetime production and so acquiesce in the survival of the shopfloor organisations in their plants.)²²⁴

Though management tolerated the shopfloor organisation, the stewards must have been discouraged by the new politics of post-war Edgwick. The response of section stewards who, like Bro Cobble, resigned and sought work elsewhere was entirely rational:²²⁵ after May 1946 (the date when EWO regulations formerly came to an end), they were free to seek higher wages and a less authoritarian managerial regime elsewhere. Warr's response was also understandable. At the beginning of 1946, he stood down as works convenor (though the records suggest he remained a powerful 'fixer' in shopfloor for the duration of his apparent retirement). Warr explained that he felt that he should devote more time to his new duties as a Labour councillor in Nuneaton.²²⁶ This (partial) escape from the unpromising struggles of the factory to the wider opportunities of municipal politics can be compared with Tommy Harris' political career many years before. Hinton's study of Labourism suggests that it was a predictable line of retreat for a right-wing Labour politician.

The national fuel crisis in the winter of 1947 gave the stewards a brief respite. During those few months, management suddenly discovered an uncharacteristic enthusiasm for factory-based corporatism. For example, in January 1947, the managers summoned a "special meeting" of the JPC. It was probably the first time

this august body had met since 1944. If so, the experiment paid off handsomely, for on that occasion the convenor proposed a reduction in shop temperatures.¹²⁷ When emergency power cuts were imposed, from mid-March to May, this new politics seemed to blossom: the stewards were invited to hold their meetings in the factory's reading room, granted exclusive use of a noticeboard¹²⁸ - something the committee had requested on a number of occasions since 1938¹²⁹ - and consulted over the implementation of district agreements on overtime.

Though these concessions were modest when compared with those offered by a later generation of Herbert managers, they were significantly better than any granted either before or during the War. Perhaps they were prompted by fears of demands for further sacrifices from industry up to, and including, nationalisation. After the Beveridge Report, Sir Alfred made frequent references to that "sinister plan" to extend "totalitarian principles" to the control of industry and Attlee's nationalisation programme could only have confirmed his worst fears.¹³⁰ However, I would suggest that the managers were prompted by more domestic considerations.

In the previous year there had been (re-assuring) signs that right-wing politics had become further entrenched in the shop committee's discourse. For example, in June 1946, they wrote a protest letter on the AEU's decision to support the Communist Party's affiliation to the Labour Party.¹³¹ Then, in August, they

agreed to let "lie on the table" a letter from the Trades Council on "Franco Spain".)"" There must have been other, less tangible signs which suggested that, if approached correctly, the senior stewards would be more than sympathetic to management's difficulties; that they would tolerate - sometimes even propose - a cut in shop temperatures, an increase in the night-shift and a combination of excessive overtime in some sections with short time in others.

Whatever the motive, it is clear that the senior managers decided not to antagonise the unions for the duration of the emergency. However, immediately the crisis had passed, the old order was restored. The stewards were obliged to vacate the reading room;"" management resumed its studied indifference to union complaints about violations of the overtime agreement and the continued presence of a dilutee in the toolroom; and the JPC disappeared as quickly as it had come. Understandably, morale within the shopfloor organisation resumed its downward slide: in June and July several meetings were inquorate; and in October, Bro. Buxton, Edgwick's new works convenor, staged his own form of protest. Complaining bitterly that "management had let him down rather badly", he resigned."" A few weeks later, Buxton was persuaded to resume his duties and, indeed, he stayed in office until December 1949; but it seems that the situation did not improve significantly during those last two years. The turnover of both section stewards and committee officers remained exceptionally high - which prompted Buxton to complain of a

"falling off on the numbers of shop stewards representing our members at AH Ltd²⁰⁰ - and the leadership appeared increasingly bereft of ideas. The minutes of committee meetings during those closing years of the 1940s suggest that the organisation was simply marking time, waiting for happier moments. Shortly after Cadman - significantly, a section steward from the 'factory' and not the toolroom - became convenor, the committee held a "lengthy discussion on...the low rates of wages being paid at AH in comparison to other firms in the City".²⁰¹ In June 1950, a "special meeting" of the shop stewards marked the start of a "low wage campaign".²⁰² However, by this time the senior managers had reached the same conclusion over pay and also recognised the need to revive, to a very limited extent, the corporatist politics of 1947; but this will be discussed in the next chapter.

Conclusions:

While it is true that the unions made only "restricted and partial gains" at Edgwick, the War did have a major impact on factory politics there. The senior managers were obliged to make a series of concessions and mould the company's variant of employer paternalism to incorporate the existence of a shop stewards' organisation. Given the unchanged character of the production process at Edgwick and the strength of the paternalist ideology - buttressed by the politics of the gang system - in the

minds of large sections of the workforce , these concessions should not be belittled. Nonetheless, they were certainly less spectacular than the gains secured by engineering workers at some of the other, large factories in Coventry, and must have discouraged the militants who had rebuilt the shop stewards' organisation in the mid-1930s. The fragmentary evidence suggests that by 1942 most of these early activists had either quit Herbert's, or accepted transfers to neighbouring plants and, in so doing, took with them their own kind of leftist politics. Those who remained, and emerged as the organisation's new leadership, were men who could more readily accommodate themselves to the peripheral role management was prepared to offer the unions.

After the War, the managers quickly rolled back some of those gains, limited though they were, and encouraged the departure of several activists. But no attempt was made to smash the shopfloor organisation, probably because it was not worth risking a further decline in productivity and exacerbating the firm's labour shortages. In the early months of 1947, a form of corporatism briefly flourished once again. Unprecedented concessions were made to secure the senior stewards' support for cuts deemed necessary to survive the crisis caused by shortages of fuel and materials (and possibly appease a threatening Labour government). Immediately after this crisis had passed, most of those concessions were snatched away and the workplace organisation relapsed into a crisis of confidence. Signs of a recovery of

morale were not evident until 1950; but by this time, the senior managers had also begun to re-appraise their attitude towards the unions.

Though suggested, relatively little attention was given in this chapter to the resilience of a certain set of relationships between managers and skilled workers and between the latter and other sections of the workforce. Despite the shocks and challenges it suffered - the politics of the new activists who re-built the organisation outside the craft enclave of the patternshop; the war and the attempts at dilution and forms of state-sponsored corporatism that came with it; followed by redundancies and the restoration of pre-war practices - this structure endured. Its submersion in this chapter is not intended to reflect its significance in an assessment of the character of workplace politics at Edgwick. On the contrary, I would argue - and the purpose of the next chapter is to demonstrate - that this structure or set of relationships provides another important clue to the frail and quiescent character of the shop stewards' organisation on into the 1960s and beyond.

Chapter Five: Endnotes and References

1. This statement is based on a former employee's account of the strength of the patternmakers' union at Herbert's Edgwick plant throughout the inter-war period. See Phillip Banks-Price, interview held on 8 June 1982.
2. The collapse of the shop stewards' organisation at the Butts plant is inferred from general accounts of the troubles of the AEU in Coventry and from the absence of any reference in the AEU district minutes to the stewards at the Butts after the 1922 Lock-Out. See: Frank Carr, "Municipal Socialism: Labour's Rise to Power", in *Life and Labour in a Twentieth Century City: The Experience of Coventry*, (eds.) Bill Lancaster and Tony Mason, (Coventry: Cryfield Press, n.d.), pp. 191-2; John McGrath Davies, "A Twentieth Century Paternalist: Alfred Herbert and the Skilled Coventry Workman", in the same work, pp. 108-9.
3. AEU Coventry District Committee Minutes, 22 February 1923.
4. Ibid., 8 January 1924.
5. Ibid., 7 June 1932.
6. Hazy Earnshaw, cited in Davies, "Twentieth Century Paternalist", p. 113.
7. James Hinton, "Coventry Communism, A Study of the Communist Party and Factory Politics During the Second World War", *History Workshop Journal* 10 (1980), p. 104.

8. Ron Green, interview held on 2 February 1982.
9. Frank Carr, "Municipal Socialism", p. 182.
10. Ibid., p. 193.
11. "Presentation to Alderman T.J. Harris", *Coventry Standard*, 6 April 1940.
12. Frank Carr, "Municipal Socialism", p. 198.
13. Phillip Banks-Price, interview.
14. Bill Elliston, interview held on 12 June 1982.
15. AEU Coventry District Committee, minutes of meeting held on 26 March 1934.
16. Edmund P. Learned, Francis J. Aguilar, and Robert C.K. Valtz, *European Problems in General Management* (Homewood, Ill.: Richard D. Irwin, Inc. for IMEDE, 1963), p. 30.
17. Bernard Woolly, interview held on 14 June 1982.
18. Jonathan Zeitlin, "The Emergence of Shop Stewards' Organisation and Job Control in the British Car Industry: Review Essay", *History Workshop Journal* 10 (1980), p. 126.
19. Walter Shepherd, Industrial Relations Officer at Alfred Herbert Limited, note of meeting with stewards on 13 April 1942.
20. Zeitlin, "The Emergence of Shop Stewards' Organisation", p. 126.
21. Harry Marston, letter to Stephen Tolliday, 14 November 1980.
22. Vic Brown interview held on 7 July 1982.
23. Ibid.
24. Zeitlin, "The Emergence of Shop Stewards' Organisation", p. 122.

25. Richard Croucher, *Engineers at War, 1939-1945* (London: Merlin Press, 1982), ch. 2.
26. AEU District Committee, minutes of meeting held on 26 June 1934.
27. Ibid., 27 November 1934.
28. Ibid., 21 July 1936.
29. Ibid., 28 July 1936.
30. Ibid., 3 November 1936.
31. Ibid., 10 November 1936.
32. Ibid., 24 November 1936.
33. Ibid., 1 December 1936.
34. Ibid., 8 December 1936.
35. Stephen Tolliday, "Government, Employers and Shopfloor Organisation in the British Motor Industry, 1939-69", Kings College Research Centre, mimeo, September 1982.
36. The headline in a special issue of *New Propellor*, October 1937, cited in Croucher, *Engineers at War*, p. 47.
37. George Smith, interview held on 27 April 1982.
38. Vic Brown, interview.
39. Tom Batchelor, interview held on 2 March 1982.
40. Ron Green, interview held on 2 February 1982.
41. Vic Brown, interview.
42. AEU Coventry District Committee, minutes of meeting held on 12 January 1937.
43. Croucher, *Engineers at War*, p. 46.
44. Ibid., p. 45.
45. AEU Coventry District Committee, minute of meeting held on 6

April 1937.

46. Ibid., 8 June 1937.
47. Ibid., 2 October 1937.
48. Ibid., 5 October 1937.
49. Ibid., 14 October 1937.
50. Vic Brown, interview.
51. AEU District Committee, minute of meeting held on 11 May 1937.
52. Ibid., 22 June 1938.
53. George Smith, interview.
54. Vic Brown, interview.
55. Richardson, *Twentieth Century Coventry*, p. 21.
56. Stephen Tolliday, "Government, Employers and Shopfloor Organisation", p. 7.
57. Richard Croucher, *Engineers at War*, pp. 25-6.
58. Tolliday, in "Government, Employers and Shopfloor Organisation", p. 7, talks of the powerful and effective anti-unionism of two large employers in Coventry: Singer and Car Bodies. Through scattered references, the AEU District Committee minutes also give a flavour of workplace organisation in the local engineering firms.
59. Croucher, "Communist Politics and Shop Stewards in Engineering, 1939-1946" (Ph.D. thesis, Warwick University, 1978), p. 218.
60. AEU District Committee, minute of meeting held on 20 January 1940.
61. Ibid., 10 April 1938.

62. Ibid., 26 July 1938.
63. Harry Marston, letter to Stephen Tolliday.
64. AEU District Committee, minute of meeting held on 15 April 1939.
65. Alfred Herbert Limited, minute of Directors' meeting held on 29 January 1941.
66. Ibid., 19 March 1941.
67. *Alfred Herbert News*, May/June 1952, p. 46.
68. Alfred Herbert Limited, Directors' meeting on 3 June 1942.
69. Croucher, *Engineers at War*, p. 77.
70. AEU District Committee, minute of meeting on 15 June 1939.
71. Alfred Herbert, *Shots at the Truth* (Coventry: Alfred Herbert, 1948), p. 18.
72. Ibid., p. 28.
73. Alfred Herbert Limited, Directors' minutes, 8 May 1940.
74. Ibid., 21 August 1945.
75. Ibid.
76. Ibid.
77. Herbert, *Shots at the Truth*, p. 60.
78. Ernie Digger, interview.
79. Croucher, *Engineers at War*, pp. 95-8.
80. See scattered references to former Herbert stewards in the AEU District Committee minutes of meeting held on 6 September 1938 and 15 November 1938; also, George Smith, interview.
81. AEU District Committee, minute of meeting held on 23 April 1940.

82. Ibid., 21 May 1940.
83. Ibid., 28 May 1940.
84. Ibid., 28 May, 6 August, and 17 December 1940.
85. Tolliday's research suggests that many more employers took advantage of Ministry of Labour transferrals in this way. He cites, as an example, a factory in Manchester which, when it was re-opened to undertake production of Merlin engines, had a toolroom full of ex-shop stewards and victimised militants. See, "Government, Employers and Shopfloor Organisation", p. 12.
86. Croucher, *Engineers at War*, p. 117.
87. Shepherd, minute of meeting held on 7 May 1941.
88. Hinton, "Coventry Communism", p. 94.
89. Alfred Herbert Ltd., "Alfred Herbert Limited", a potted history of the company, mimeo, 19 September 1975.
90. Alfred Herbert, minute of Directors' meeting on 8 January 1941.
91. Croucher, *Engineers at War*, p. 144.
92. Ibid.
93. Ibid.
94. Hinton, "Coventry Communism", p. 93.
95. Tolliday, "Government, Employers and Shopfloor Organisation", pp. 7-8.
96. Ibid.
97. Croucher, *Engineers at War*, p. 179.
98. Ibid.
99. Herbert JSSC, minute of meeting held on 23 September 1942.

100. Shepherd, minute of meeting held on 4 March 1942.
101. Herbert JSSC, minute of meeting held on 4 March 1942.
102. Ibid., 18 March 1942.
103. Shepherd, minute of meeting held on 23 March 1942.
104. Ibid., 26 March 1942.
105. Ibid., 27 March 1942.
106. AEU Coventry District Committee, minute of meeting held on 23 April 1940.
107. Shepherd, minute of meeting held on 30 March 1942.
108. Ibid., 28 March 1942.
109. Herbert JSSC, minute of meeting held on 1 April 1942.
110. Ibid., 15 April 1942.
111. Shepherd, minute of meeting held on 20 April 1942.
112. Phil Barnes, interview on 10 June 1982.
113. Shepherd, minute of meeting on 30 September 1942.
114. Herbert JSSC, minute of meeting on 5 September 1942.
115. Tolliday, "Government, Employers and Shopfloor Organisation", p. 11.
116. Shepherd, minute of meeting on 8 December 1942.
117. Ibid., 17 November 1942.
118. Ibid., 8 December 1942.
119. Ibid., 19 December 1942.
120. Ibid., 30 December 1942.
121. Ibid., 31 December 1942.
122. Ibid., 4 January 1943.
123. Alfred Herbert Ltd., minute of Directors' meeting on 21 August 1945.

124. Tolliday, "Government, Employers and Shopfloor Organisation", p. 3.
125. Phillips Banks-Price, interview.
126. Herbert JSSC, minute of meetings held on 2 December and 16 December 1942.
127. Alfred Herbert Ltd., minute of Directors' meeting, 17 October 1945.
128. Hinton, "Coventry Communism", p. 110.
129. Shepherd, minute of meeting held on 9 October 1942.
130. Ibid., 28 March 1942.
131. Ibid., 13 July 1942.
132. Tolliday, "Government, Employers and Shopfloor Organisation", p. 6.
133. Shepherd, minutes of meetings held on: 18 March, 25 April and 7 October 1942.
134. See Croucher, *Engineers at War*, ch. 3, for an account of the politics of the JPC campaign; also Hinton, "Coventry Communism", p. 98.
135. Herbert, *Shots at the Truth*, p. 25.
136. Hinton, "Coventry Communism", p. 99.
137. Herbert, *Shots at the Truth*, p. 28.
138. Hinton, "Coventry Communism", p. 99.
139. Shepherd, minute of meeting held on 13 April 1942.
140. Ibid., 25 April, 1942.
141. Croucher, *Engineers at War*, pp. 149-50.
142. Shepherd, minute of meeting held on 26 June 1942.
143. Ibid., 9 October 1942.

144. Ibid., 5 November 1942.
145. Herbert, *Shots at the Truth*, p. 79.
146. Herbert JSSC, minute of meeting held on 21 October 1942.
147. Ibid., 9 February 1944.
148. Hinton, "Coventry Communism", p. 103.
149. Croucher, *Engineers at War*, p. 144.
150. Ibid., p. 145.
151. Shepherd, minute of meeting held on 16 June 1942; Herbert JSSC, minute of meeting on 23 September 1942.
152. Herbert JSSC, minute of meeting on 21 October 1942.
153. Richardson, *Twentieth Century Coventry*, p. 95.
154. Herbert JSSC, minute of meeting 12 July 1942.
155. Hinton, "Coventry Communism", p. 93.
156. Shepherd, minute of meeting on 26 October 1942.
157. Alfred Herbert Ltd., minute of Directors' meeting on 9 July 1941.
158. Shepherd, minute of meeting on 22 September 1943.
159. Tolliday, "Government, Employers and Shopfloor Organisation", p. 6.
160. Herbert, *Shots at the Truth*, pp. 54, 121.
161. Herbert JSSC, minute of meeting on 8 September 1943.
162. Shepherd, minute of meeting on 21 June 1943.
163. Ibid., 19 August 1943.
164. Alfred Herbert Ltd., minute of Directors' meeting on 20 October 1943.
165. Herbert, *Shots at the Truth*, p. 101.
166. Herbert JSSC, minute of meeting on 21 February 1946.

167. Alfred Herbert Ltd., minute of Directors' meeting on 18 July 1945.
168. Ibid., 9 January 1946.
169. Ibid., 28 November 1945.
170. Ibid., 18 May 1943, 1 January 1944.
171. Ibid., 7 June 1944.
172. Ibid., 21 August 1945.
173. Ibid., 8 December 1944.
174. Ibid., 20 February 1946.
175. Ibid., 16 February 1944.
176. Ibid., 21 August 1945.
177. Ibid., 6 February 1946.
178. Ibid., 21 August 1945.
179. Shepherd, minutes of meetings on 30 May and 16 June 1944.
180. Alfred Herbert Ltd., minute of Directors' meeting on 28 November 1945.
181. Herbert JSSC, minutes of meetings on 6 September and 27 September 1945.
182. Ibid., 10 October and 25 October 1946.
183. Ibid., 23 January and 27 March 1947.
184. Ibid., 17 February 1949.
185. Alfred Herbert Ltd., minutes of Directors' meetings on 21 August and 28 November 1945.
186. Ibid.
187. Ibid., 21 August 1945.
188. Ibid.
189. Ibid., 22 May 1946.

190. Herbert JSSC, minute of meeting on 27 September 1945.
191. Ibid., 10 January and 13 June 1946.
192. Ibid., 16 May 1946.
193. Ibid., 8 August 1946.
194. Tolliday, "Government, Employers and Shopfloor Organisation", pp. 10-11.
195. Herbert JSSC, minute of meeting on 26 September 1946.
196. Ibid., 10 January 1946.
197. Ibid., 23 January 1947. Another reference to JPCs on 5 June that same year hints at the possibility that other, local engineering firms had also revived these committees for the duration of the fuel crisis. This would conform with Harvie Ramsay's brief mention of this period in "Participation: the Pattern and its Significance", in *Capital and Labour*, (ed.) Theo Nichols (Glasgow: Fontana, 1980), pp. 389-90.
198. Herbert JSSC, minute of meeting on 13 March 1947.
199. AEU Coventry District Committee, minute of meeting on 14 June 1938.
200. Herbert, *Shots at the Truth*, pp. 93-4.
201. Herbert JSSC, minute of meeting on 13 June 1946.
202. Ibid., 11 July 1946.
203. Ibid., 1 May 1947.
204. Ibid., 21 October 1947.
205. Ibid., 12 August 1948.
206. Ibid., 6 April 1950.
207. Ibid., 22 June 1950.

SHOPFLOOR TRADE UNIONISM AT HERBERT'S: A CASE STUDY IN THE
DEVELOPMENT AND DEMISE OF WORKPLACE ORGANISATION.

KENNETH GRAINGER

Doctor of Philosophy
The University of Warwick
Sociology Department

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CHAPTER SIX: DECLINE AND CHANGE IN A POST-WAR WORLD.

Introduction

The previous chapter outlined the development of the shop stewards' organisation and the broad features of its politics during its early years at Edgwick. The "limited and partial gains" the organisation made during the war and the right-wing politics of its leadership were contrasted with the conventional, celebratory accounts of shop stewards' activities during the war. These findings were explained, principally, in terms of features of the fragmented character of the labour process, the anti-union stance of the employer, and the character of state interventions in industry. Though suggested, little attention was given to the influence of the set of relationships between managers and skilled workers and between the latter and other groups of workers at Edgwick and its resilience in the face of various shocks and challenges. Continuing the narrative into the 1950s and 1960s, this chapter will explore that those relationships in some detail through an analysis of the sectional distinctiveness of the labour process and union organisation. In particular, I will try to show that the weak shopfloor organisation and "somnolent" character of the workforce reflected the interests of those sections at the top of the plant's labour hierarchy.

This task is attempted in four parts. The first sets the scene by pointing out the main features of Herbert's product market and management's response to it during the 1950s. The second discusses the shop stewards' response to management's cautious moves towards an accommodation with the workplace organisation. The third part looks in some detail at the various sections within the workforce to explain its apparent "somnolence" and its tenuous links with the shop stewards' committee. The fourth and final part evaluates the significance of certain shifts in shopfloor politics as the dominance of the toolmakers is finally broken. Overall, then, the chapter seeks to provide a cumulative account of the interplay between management policies, the sectional character of both work organisation and shopfloor unionism, and the long stability and eventual partial re-casting of the stewards' organisation during the 1960s.

A Management-Created Terrain

Herbert's product market

During the early part of 1950s, Herbert's continued to enjoy a boom that had started twenty years earlier. The company benefitted from a set of uniquely favourable circumstances that brought an 'Indian summer' to many machine tool firms in Britain, namely: the revival of the defence industry; the dismemberment of the German machine tool industry and the temporary elimination of

other rivals in a war-devastated Europe; and the fact that machine tool builders in both the USA and the USSR were oriented towards their own vast internal markets.³ Years later, a sales executive told Williams "semi-jocularly" that the company's attitude to its customers then was thus:

"We told them they could have a machine if they were prepared to wait a year for it and if they promised to look after it."⁴

But it was a false complacency. By the middle of the decade, the revival of the European industry was well under way, a number of American firms were establishing manufacturing subsidiaries in Britain as part of a drive to expand sales in western Europe, and there was concern that the Soviet Union would inevitably switch some of its enormous productive capacity to export markets.⁵ Herbert's products, increasingly uncompetitive both at home and abroad, were taking a declining share of those markets.⁶ But the fact that it was still a relative decline helped Sir Alfred to follow his own inclinations and resist pressure for change. Plans for the introduction of group technology were deferred indefinitely; there was minimal investment in new plant and machinery; and reports on the technical obsolescence of Herbert designs were ignored. Sir Alfred's complacency during those years contrasts strongly with those celebratory accounts of his early years which describe his appetite for innovation, his readiness to exploit new designs, new techniques and new commercial opportunities.⁷ The Chairman justified his conservatism by pointing to the backlog of orders and the continuing accumulation

of profits; but other factors may have influenced his judgement. To a limited extent, it may have been a product of the technological conservatism of Herbert's domestic customers, especially the British car industry. But I would argue that the founder's private circumstances, his patriarchal ideas on women's roles, and the 'masculine' ideology of the industry were more important factors.

By the 1950s, Sir Alfred was in his eighties and without a son to inherit control of the business. It is unlikely that he ever considered his daughter, Gladys, as a suitable heir to the business, though not simply because of his own attitudes on gender roles. Contrary to the impression given in an essay by Thoms and Donnelly,⁴ Sir Alfred was prepared verbally to challenge stereotypes about women's potential abilities as engineering workers. For example, in one of his house journals, he cited approvingly the case of a munitions factory manager who, during the 1914-18 War, dismissed all the turret lathe operators and "replaced them with hefty women, who produced about twice the output."⁵ However, he was very much a conformist in practice. The women among his employees were confined to the traditional occupations: cleaning, cooking, routine office work, packing, and performing machine work that required "fine perception and manual dexterity."⁶ More importantly, the women in his family conformed to roles prescribed by a rigidly patriarchal system such as visiting sick employees, attending local church services and various social functions organised by the firm. Davies has argued

that Sir Alfred consciously used both wife and daughter to portray his business as a caring, family firm. But even if he had been prepared to free his daughter from the straitjacket of that ideological role and considered training her for management, he would have been inhibited by the attitudes of his employees and fellow employers, and his own ideas on management training which involved a lengthy apprenticeship on the shopfloor. Given, then, his age and the absence of a suitable heir, it is hardly surprising that Sir Alfred appeared to have little interest in the long-term prospects of his company.

Transformations of corporatism at Herbert's

At the conclusion of the previous chapter it was noted that during the immediate post-war years - except for a few months during the national fuel crisis in 1947 when something reminiscent of the state-sponsored corporatism of the war years seemed to flourish once again - the shop stewards had to treat with a management determined to restore "*pre-war practices*". Piecing together the story from both the shop stewards' minutes and those of the Herbert directors, it is clear that management maintained this 'tough' line so long as it remained preoccupied with making adjustments to the austerities of the post-war world. However, towards the end of the 1940s, circumstances changed again when the Government revived its defence programme and the

international product markets, briefly free of any serious competition from Herbert's major rivals abroad, expanded in response to the demands of Europe's post-war reconstruction. The new orders reversed Herbert's fortunes and, once again, the managers had to cope with a desperate shortage of labour, particularly skilled labour, at Edgwick.

At the beginning of 1950, management's initial response to the problem of labour shortages was to push for an increase in Edgwick's night-shift; but this tactic was quickly abandoned when the directors realised that it actually increased the exodus of skilled labour from the plant.¹⁰ Another tactic was to sub-contract work;¹¹ but this, too, proved unsatisfactory. There were a number of technical difficulties and later complaints that the sub-contractors' products were "costing a great deal more than making them in our own works".¹² Eventually, and with obvious reluctance, the board reached the conclusion that it would have to offer higher pay to its employees.¹³

The shop stewards' minutes show that these deliberations coincided with a gradual softening in management's stance towards the trades unions. In July 1950, the works director, Harrison, appeared at a meeting of the shop committee and spoke about the company's intention to implement a new bonus scheme which would significantly raise earnings at Edgwick. The available records suggest this intervention was unprecedented. After a vague sketch of the proposed payment scheme, the director concluded his speech

by expressing the hope that his visit would not be the last as "he was prepared to meet the stewards at any of their monthly meetings and hoped by so doing to create that goodwill between Management and men which was so necessary for the benefit of both."¹³ For some reason, Harrison did not fulfill his promise; but the shop committee quietly waited for further news until October when the convenor warned that the "men are getting impatient".¹⁴ This appeared sufficient to prompt two directors and the "industrial officer" to attend the very next meeting and present the final arrangements for the pay offer - which the committee promptly accepted.

During the 1950s the senior managers attended only a few more committee meetings; but on each occasion they intervened on key issues. In August 1957, they attended one gathering to outline (and presumably justify) changes in the pay structure.¹⁵ Exactly a year later, they returned to explain why redundancies were necessary.¹⁶ They came once again in February 1960 to present their plans for another major revision to the pay structure.¹⁷

In addition to their attendance at committee meetings, there were other visible signs of the managers' 'softening' attitude towards the unions. In the early 1950s, the works convenor began to receive pay for time spent on union business. Shortly afterwards, the same concession was granted to the shop committee's secretary.

The motives for this rapprochement are not recorded on any available management records. However, it is not difficult to imagine ways in which such a reconciliation could have proved very useful to the managers.

Though Sir Alfred had reached his eighties by this time and visited Edgwick less and less frequently, he remained very much the firm's *"Sole and Governing Director"*. The other directors, all veteran Herbert employees, were careful to operate within the constraints set by his managerial philosophy. One of those constraints was Sir Alfred's determination to keep a tight control on piecework prices, even in the face of strong competition for labour. During the War, his managers had tried to resolve this contradiction by being *"liberal"* on claims for non-productive work.²⁸ Roger Williams' research shows that the shop bonus, or *"Alfred Herbert Award"* as it was called, was used to fulfill the same function in the 1960s. He found that increases in the shop bonus kept pay within *"striking distance"* of the district average.²⁹ From the fragmentary data available in management and union records, it appears that this same device was used from 1950 onwards.³⁰

Of course, none of this explains why management 'awarded' those increases through negotiations with the unions. They could have raised the shop bonus without recourse to the shop stewards - but this would have been an unprofitable line to follow for three reasons. First, the increases were far too small to persuade

workers non-unionism 'paid'. Second, it suited management to maintain its "hard gaffers" front - to keep tight control over job prices and a host of other labour issues - and that was more easily achieved if the pay increases were seen to be the product of tough bargaining with the unions. Third, and last, if the increases could be used to purchase an accommodation with the shop committee or, more precisely, with key members of that committee, then that opportunity was not to be missed. In fact, the records indicate that the senior managers fostered a special relationship with the AEU at the expense of the TGWU, and with a few shop stewards at the expense of others, in a way that must have been calculated to re-inforce the sectional divisions between workers and disable the shopfloor organisation.

Shortages of skilled labour lay behind the limited accommodation with the stewards of skilled men, but management remained hostile to unionism among other workers throughout this period. For example, Phil Barnes, a middle-level manager, described the packers in a way in which sexist attitudes were tangled with ideas about hierarchies of skill:

"They were only in TGWU, or something - all the rest were in AEU, you see, skilled men, you see...There were two distinct unions, you see...None of the poles would meet. The women in the packing were just in TGWU - the scrubbers' union..."

More tangible evidence of managerial opposition to the "scrubbers' union" is provided by the firm's refusal to pay for

any of the trade union activities of the deputy convenor - a position normally occupied by the senior TGWU steward - until sometime in the 1960s despite the fact that the convenor and committee secretary, both members of the AEU, enjoyed this concession from the early 1950s.

In addition to their opposition to the TGWU, the managers also acted in ways that strengthened the position of the two senior AEU stewards, Feltham and Warr, within the shopfloor organisation at the expense of the other shop stewards. The firm refused to compensate the section stewards for loss of earnings when they attended committee meetings. Shopfloor collections for charities - always an excellent excuse for stewards to get out and talk to their membership during company time - were banned. Even the more 'legitimate' forms of self-activity were discouraged. Vic Brown, a section steward in the main fitting shop, recalled:

"they didn't like the blokes leaving the shopfloor, even the shop stewards to go up, you see. But (the convenor) was in the toolroom, and he could get up there.""

But Vic did not question how this situation arose. The favoured status of the convenor seemed a matter of convenience. It appeared easier for management to treat with the convenor and the secretary - and pay them for loss of earnings while in negotiations - because both officers worked in the toolroom which had switched to a daywork system in 1950. Nonetheless, Vic felt frustrated by the limited scope to his work as a representative:

"You'd get nowhere. No matter what you took up, they took no

notice of you; they would a convenor, but the shop steward didn't have a lot to say."

If management's intention was to undermine the section stewards' self-confidence as members of a collective organisation and make them dependent on the negotiating skills of the convenor, it appeared to work extremely well. On routine grievances, Warr was allowed to approach works management on his own, and even on major issues, such as the shop bonus, he was expected to fix some kind of deal. As Vic Brown put it, Warr was "a cadger" who would "give a bit to take a bit":

"He used to go up after something...and you didn't expect anything; but he'd come back with a little bit, enough to satisfy. And I think that he had a rapport with the management. They knew, you know...They knew what the other was prepared to give and take, you know."

From management's position, Herbert's rather restricted form of employer-sponsored corporatism was essentially a pragmatic response to the chronic shortage of skilled labour experienced by the company throughout the 1950s. It involved a recognition of workplace organisation at Edgwick; but a recognition that was very much on the company's terms. It suited the managers to encourage the "sober trade unionists"³³ within that organisation, those with a preference for conciliation rather than confrontation, those with an individualistic 'mister fix-it' approach to factory politics. From the little information

provided by the minute books and the recollections of other workers, it appears that Freddy Warr, who resumed office as works convenor in 1950 and stayed there for the next 11 years, seemed to match management's needs more than adequately.

The Stewards' Response

Warr was, as Vic said, "a cadger". He had a knack of securing compromise deals that were sufficient to avoid a dispute and, in some of the incidents I shall relate later, it is clear that he sought to undermine his colleagues' resolve to take strike action when his own skills as a "cadger" failed. In addition, there is no doubt that, irrespective of the considerable status he enjoyed as a long-service toolroom worker and an experienced Labour councillor, Warr was also very competent as a political 'fixer'. His influence was evident even during the immediate postwar years when he was formally 'out of office'. Last, and certainly not least, Warr was positively enthusiastic over management's gingerly embrace of the shop stewards' organisation, as the following incident suggests.

In May 1959, Walter Shepherd resigned as Herbert's first Industrial Relations Officer. At that time, the machine tool industry was in the depth of a trade recession and Herbert's had already dismissed several hundred workers at Edgwick (with plans for more to follow). But this did not discourage the committee

from marking Shepherd's (voluntary) departure with the presentation of a stainless steel tray; nor did it mar the cordiality of the occasion. In his acceptance speech Shepherd said "he was very pleased of this opportunity to thank them for the way they had conducted their business when he was on the Other Side of the Table". Warr replied in kind with the comment that "the firm was wrong in letting Mr Shepherd go as he believed that a useful job could have been done on both sides."²⁴

The minute books also hint that very occasionally, Warr's, and his closest colleagues', enthusiasm for this new politics created some embarrassing situations. For example, there was an occasion when the convenor devised a "Profit Sharing Scheme" (to replace the output bonus) which management promptly rejected.²⁵ On another occasion, at a committee meeting, the secretary asked for a vote on a pay offer while the directors were still present. The minutes read:

"This procedure was objected to by Bro Doughty...On (their) withdrawal the vote was taken. 23 for 6 against and the scheme was declared carried. On this Bro Doughty made a statement regarding the integrity of the secretary. He replied that he would ignore anything that the Bro had said."²⁶

Doughty's vocal opposition to management's presence during the vote probably gave the senior stewards a sharp reminder of the limits within which this kind of factory-based corporatism

remained compatible with the traditions of craft unionism. It also registered a rare note of dissent. For much of his period of office, Warr dominated the shop committee. There were perhaps no more than three or four occasions - some of which I will discuss later in this chapter - when his leadership was openly challenged by other members of the shop committee.

Despite these 'hiccups', the managers must have been well pleased with the character of factory politics at Edgwick during the 1950s. During that period, the shopfloor organisation demonstrated an extremely tenuous relationship with its membership which appeared to discourage it from organising collective action - either against Herberts' low pay policy in the early 1950s or redundancies in the latter part of the decade. Yet there was also a near-absence of sectional strikes.

Evidence of the tenuous links between the shop committee and its membership is suggested, first of all, in the fact that during the 1950s the minute books recorded few debates about sectional issues. Instead the notes reinforce the impression given by informants such as Vic Brown that the works convenor was usually left to resolve sectional grievances where possible or notify the district officials so that they could process the complaints through the formal disputes procedure. Another, and perhaps more telling way in which the minutes demonstrate the frailty of that relationship is through its chronicle of the committee's financial difficulties.

Until 1959, when a tote was organised to raise funds, the committee experienced recurring difficulties in levying enough funds from its membership to re-imburse section stewards for attending its meetings during company time. The minutes record frequent arguments about how often and how much money should be requested. One solution, or one straw, grasped by the committee gives some idea of just how serious this problem was:

"Treasurer gave a report and stated that the S.S. Fund was in the red to the amount of about £30. Proposal that we ask for 6p per month of members was defeated and an amendment that we made an appeal on the notice board was carried.""

Apparently, this appeal failed and a rather anxious committee subsequently instructed the convenor to ask management "for a weekly stoppage from wages of 1p". After that request was rebuffed by management - a response that must have been anticipated - the issue became so critical that it eventually led to a split in the committee.

When the TGWU stewards decided to make contributions compulsory and, in July 1958, secured a ballot of their members in favour of this proposal, the shop committee voted to suspend "any member of the Committee whom agrees of the operation of the new T+G Shop Stewards Fund". The effect of this decision was to almost halve attendance for the remainder of the year. The split was not healed until the next AGM when a "unity meeting" agreed to raise funds through a monthly tote. Fortunately, where appeals to

loyalty had failed, greed succeeded. Within six months," the treasurer found it necessary to set up a bank account in the committee's name and, two years later, the shop stewards could afford to grant themselves an allowance of 10/- an hour which was just short of the district average at that time and rather better than standard hourly earnings at the plant."²

Given these observations on the weakness of the shop committee as a collective and the section stewards' dependence on "cadger" Warr, it is not surprising to find that the minutes evoke the image of a shopfloor organisation that was reluctant to organise strike action. In the postwar years up to 1961, there were a few "demonstrations" over the shop bonus which usually took the form of walk-outs for works meetings or sit-down strikes, and there were one-day strikes instructed by the Confed. Similarly, given the observations on the committee's frail links with its membership, it is not surprising to find that when the shop stewards did organise stoppages, they frequently encountered an even greater reluctance from some sections of their membership. For example, in November 1953, a "Round Robin" against one stoppage called by the Confed was circulated around the Ardoley shop. On another occasion, the committee decided to cancel a works meeting over the shop bonus because:

*"The Stewards had not the confidence that the works were behind them. Following the poor demonstration on Sat Jan 28th over the National Issue."*³

However, the near absence of sectional stoppages certainly could not be explained so easily. In a plant where the piecework payment system was riddled with anomalies and wage rates kept below the district average, an observer would expect a weak shopfloor organisation to result in a noticeable level of sectional activity. Instead, the records suggest that overtime bans, walk-outs and other forms of stoppages occurring at a sectional level were similarly rare events. Between 1945 and 1961, the minute books record only seven such protests, the press reported one other, and none of them lasted more than a few days. This suggests that management's strategy towards the unions, successful as it was, cannot offer a full explanation for this apparent somnolence. Similarly, I would argue that the frailty of the shop stewards' organisation and the character of its leadership - while consistent with management's objectives - cannot be attributed wholly to the managers' political skills. Instead, I would argue that management's industrial relations success was largely based on other factors which inhibited the development of a collective consciousness within the workforce, and fractured it into hierarchies of gender, age, race and skill - hierarchies in which its elites, in the circumstances that confronted them during the 1950s, were not inclined to support the politics of militant unionism.

Sectionalism, Hierarchy and 'Somnolence'

My intention in this section is to examine in some detail the patterns of sectionalism and hierarchy which characterised Herbert's in the 1950s and 1960s, to provide a fuller understanding of the context and character of management initiatives and steward responses in this period. In developing this account I have drawn from a variety of fragmentary evidence in the stewards' minutes, in personal testimonies, in management documents and from published and unpublished studies (including some internal reports on similar settings or adjacent periods, but which provide the basis for informed extrapolation). A major analytical concern has been to provide a comprehensive exploration of the patterns of sectionalism and hierarchy, and in particular to uncover the often taken-for-granted or 'invisible' presence of women and Asian workers in such settings as Herbert's.

In an examination of shopfloor hierarchies at Herbert's, it may help to think of Edgwick as two plants instead of one: a medium-sized foundry complex, and a large engineering factory. The foundry complex, which occupied the north section of the site, was composed of a pattern shop (and stores), two small foundries and a fettling shop. These units mirrored the power structure within the workforce. Unfortunately, the divisions within the engineering 'plant' are less distinct topographically. Though it would not be apparent from a site layout, engineering

workers at Edgwick often thought of the 'plant' as two separate factories: the largest building, a quarter of a mile in length, housed the main machine shop, fitting bays, toolroom and despatch department; alongside its west wing and "upstairs" was another building known as the "factory" which, in addition to a large number of semi-skilled sections that gave it its nickname, contained several enclaves of craft labour.

At a technical level, all these units came together in a form of vertical integration. The foundry complex produced the major castings for the machine shop, which in turn produced the finished components for the fitting bays. In the "factory", the majority of the workers were involved in machining the tools and accessories for the machine tools assembled in the main fitting shop (though others were also involved in the assembly of drilling machines and the simpler forms of boring machines). However, despite this apparent integration, the way production was organised and paid for created distinctive work environments which separated people between and within each unit.

The double marginalities of the foundries

The foundry complex employed a relatively small part of the workforce at Edgwick. Figures provided by Roger Williams' study and those from oral evidence, suggest there was anything between

200 to 300 foundry workers at Herbert's: a figure roughly equivalent to only 10% of the total manual workforce on the site. In addition to its size, the foundries were also marginal in the sense they had very little effect on the shopfloor politics experienced by most of the workers at Edgwick. This double marginality may well be the main reason why the foundry complex is completely ignored in two recent case studies of Herbert's (and little discussed in earlier chapters of this work).²⁴ Yet it deserves some attention because it was a part of Edgwick in which the divisions between workers both contrasted with and paralleled the patterns that existed elsewhere on the site. Contrary to the experiences of the engineering workers at Edgwick, inside the foundries the hierarchies of pay and skilled status did not neatly correspond; and yet, as in the engineering shops in the plant, Asian men were confined to the lowest levels of the adult male labourforce. There were also parallels in the treatment of women: inside the engineering shops sexism restricted women to the lowest levels of the labour hierarchy; in the foundry complex, the same processes completely excluded them from the shopfloor. The aim of this section is to look at those factors that made the structure of power in the foundries both different from and similar to workplace politics in the engineering shops.

The patternshop: "a little protected world"

In the 1950s, the patternshop was a small but significant enclave

of craft labour. According to oral evidence, it employed nearly 40 patternmakers, "a few real class cabinet-makers", and about seven craft apprentices.³⁸ It seems to have been well organised from the beginning. Even during those years when the rest of the plant was a trade union desert, the United Patternmakers' Association (UPA) kept it a closed shop. There were regular elections for two "committee men" plus a shop steward who, acting as a kind of senior steward, attended meetings of the Joint Shop Stewards' Committee and assumed responsibility for the first stage of negotiations with management over pay and individual grievancies. The UPA exercised tight control over entry into the trade. Barry Doleman recalls that when he applied for an apprenticeship at Herbert's patternshop in 1950, he had to sit an entrance examination; that some of the successful applicants were later "weeded out" during their first months at Edgwick; and of those who completed the five years' training only one in three or four were offered a permanent job at Herbert's. Also in line with the classic model of craft regulation, management appeared to exercise very loose control over work itself, even with the apprentices. Unlike the experiences of engineering workers inside Herbert's toolroom, there is no evidence that management attempted to simplify the craft of the patternmakers, or impose a division of labour that enabled some tasks to be performed by semi-skilled operatives.

Throughout the post-war period, the patternshop remained an area where skilled workers could take an intense pleasure in their

work:

"I used to love to go to work in the mornings, and some nights I'd be loath to go home, really. And I wasn't the only one. There was a tremendous fellowship amongst the guys. A lot of respect for each other's skills.""

Not surprisingly, this pleasure was associated with a strong sense of pride:

"the old chap I was apprenticed to initially, Len Randall, who was a gentleman - they were all old gentlemen, they'd all got collar and ties in those days; they used to have a starched front - and he'd tell you when you could call him Len.""

And after serving an apprenticeship, Barry observed, "the old gaffer never recognised you as a patternmaker until you were about 25."

The patternshop was, for all these reasons, "a little protected world".³ Yet, despite the high level of union organisation in the shop, which was "so well respected by management in those days"; despite the tight control on entry into the trade; despite the undoubted truth in Doleman's claim that "of all the hand trades, it's probably...the most skilled": despite all this, the evidence suggests that the patternmakers earned significantly less than the other white workers in the foundries. Wage data for the 1950s are unavailable; but from Williams' figures, and Doleman's account of the struggle to restore differentials in

1964, it seems that only the Asians, confined to the grade of general process workers, earned less than these craftsmen. An explanation for this paradox cannot be attempted until something is said about the other sections in the foundry complex.

Enclaves of semi-skilled labour

In the 1950s there were just two foundries at Edgwick: No1, which produced relatively large castings such as headstocks and beds; and No2 which produced gears, spindles and some of the other, smaller components of machine tools. In both foundries, Herbert's probably employed something between 60 to 70 skilled moulders and core-makers.³⁰ Despite their 'skilled' status, they possessed few, if any, of the attributes of craftsmen. It is possible that most were members of the Amalgamated Union of Foundry Workers; but there is no evidence to suggest that by the 1950s they had organised a closed shop at Edgwick. The available evidence suggests that the union exercised very little formal control over entry into these two trades. An apprenticeship system still operated for the moulders - the core-makers had trainees only - but this did not hinder management's recruitment of 'non-indentured' moulders. Their skills had become de-based from the days when hand-moulding was a genuine craft. Now the difference between a good moulder and a bad one was, as Rimmer observed in his study of the Birmid foundries, a few months' practice on the job.⁴⁰ Core-making, if it had ever been a skilled

occupation, had long since lost that status in other foundries in the Midlands.⁴² Instead, the job was probably ascribed with a 'skilled' status by management to justify the core-makers' high pay-rates. In essence, both occupations were no more than repetitive, semi-skilled work.

Not surprisingly, the oral accounts provide no evidence of a craft pride. On the contrary, the high scrap rates - estimates range from 18% to 30% - suggest something rather different.⁴³ Yet, as mentioned earlier, their earnings were probably significantly higher than those of the patternmakers during the 1950s. Wage data for this period are unavailable, but if it is assumed that earnings were comparable to those in 1964 and 1967 - and there is some support for this assumption in the oral evidence - then it could be claimed that these two small sections of 'skilled' labour stood on the apex of Edgwick's pay pyramid. In 1967, for example, the coremakers' standard hourly earnings were 15/4 d and the moulders' were 14/9 d, compared to 13/3d received by the patternmakers and 14/6d gained by the toolroom operatives who were the best-paid engineering workers on the site.⁴⁴

The level of the moulders' and core-makers' earnings was, firstly, a product of management's response to the difficulties of labour recruitment. Work in the foundries was dirty, hazardous and subjected to great extremes of temperature. Better working conditions could be found easily elsewhere, and Herbert's was not

the only firm where the managers felt compelled to offer higher earnings to recruit and retain semi-skilled foundry workers.** This contrasted with the labour market for patternmakers where it seemed management enjoyed strong competition for the few craft apprenticeships it offered - Dolemen recalled that he sat the entrance paper alongside "boys from Bablake" - and the firm experienced no apparent difficulties in keeping the "old gentlemen" who had gained their indentures at the firm. (How many patternmakers left Herbert's and later returned as "old gentlemen" is an interesting question, but one that cannot be pursued here.) The second, and major reason for the moulders' and core-makers' relatively high pay is linked to the question of pay differentials.

The small group of semi-skilled operatives who worked in the fettling shop - whose jobs entailed no more than sanding the burrs off castings - also earned significantly more than the toolroom workers. Probably numbering less than twenty, the fettlers ranked amongst the best-paid pieceworkers at Edgwick. (In 1967, they were the best-paid. Their standard hourly earnings were 16/3d, 12% more than the toolroom elite's pay. Oral evidence indicates that these figures were partly the product of excessive overtime. Nonetheless, they must have disturbed both the moulders and core-makers who, if Rimmer's observations are applicable, would have been concerned to maintain some kind of pay differential which reflected their 'skilled' status.

At the Birwid foundries, Rimmer detected "an internal system of earnings differentials that was entirely the outcome of informal understandings shared by management and workers." He also found that "one group would be happy so long as their earnings exceeded those of another group: the exact size of this difference was less important".¹¹ Perhaps the reason for this was that among the direct production workers in the foundries earnings were so unstable that the 'skilled' workers could not hope to be exact about the differentials that would satisfy them.

Rimmer noted that a large part of this instability was attributable, both directly and indirectly, to the character of the production process combined with the use of a piecework system. He argued that because the flow of work was essentially erratic, particularly vulnerable to stoppages caused by faults or unavoidable accidents, the use of a piecework system would lead directly to sharp fluctuations in earnings. The erratic character of the production process and the piecework payment system also contributed indirectly to the instability of earnings. The relatively high turnover of labour - caused by working conditions that were, in the context of a tight labour market, rather unattractive - made it difficult for any particular occupation affected by that turnover to establish group norms on pay and effort. Rimmer found that each worker's ability to control his piece-work earnings depended, to a large part, on his length of service. Over time he would have found it easier to "fix acceptable piece-rates with a management which comprised (his)

promoted fellows", or ensure he had his share of the easier jobs and higher piece-prices, "to yield high earnings".⁴⁷ Rimmer found this situation to be more applicable to the skilled pieceworkers. I would suggest that at Herbert's it applied to the semi-skilled fettlers, too.

These observations suggest that one should not place too much importance on the size of the differentials at any one time. As I said earlier, in 1967 the semi-skilled fettlers were the best-paid pieceworkers in Herbert's foundries; but only three years earlier they were ranked behind both the moulders and the core-makers. Most likely there were significant fluctuations between these rankings through the 1960s and into the next decade.

More importantly, these movements in pay put a different perspective on the patternmakers' relatively low earnings. Their income may have been the lowest among the skilled foundry workers; yet they probably acquiesced in this situation not only because their work was infinitely more pleasant and ascribed with higher social status than the other forms of foundry work, but also because their earnings on a day-rate system were very stable. Pay was not dependent on fluctuations in the work load, on shifts in "informal understandings" about differentials, and the availability of excessive overtime. Barry may have been reluctant to go home because he gained such enjoyment from his work as a patternmaker; but for other foundry workers -

especially the general process workers - their reluctance to return home after a day's work was linked to economic need.

Racial segregation in the foundries

It is not known exactly when Herbert's began recruiting Asian workers. During the Second World War a few Indians worked in the main machine shop. However, it seems they were either technical apprentices or engineering students and their presence was a temporary one. By 1953, Asian immigrant workers were employed in sufficient numbers at Edgwick - both in the machine shop and the foundry complex - to cause unrest among the white employees and their shop stewards; but I suspect that the appearance of a few black workers would have been enough to trigger racist hostility. All that can be said with any certainty is that when Williams visited the plant in 1967, clear lines of racial segregation had been established in both the engineering shops and the foundries. In the latter, Asian workers were confined to all the unskilled and the poorer-paid semi-skilled occupations (ie not fettling). If he had asked, Williams would also have found that they were excluded from all supervisory posts though a number of the primary work groups were all-Asian.

In his study of the Birimid foundries, Rimmer observed that black workers were most numerous in the "simple direct production jobs, which are easily controlled and require few instructions".⁴⁰ He

argued that this could be explained by "language barriers" since there were few who could speak English. However, the details of his own research suggest that the distribution of black workers across the job hierarchy was fundamentally determined by the turnover of white workers. Thus, he found at one foundry that a high labour turnover had "opened the skilled grades (excluding patternmaking - KG) to immigrant entry".²⁰ Following this line of argument, the exclusion of black workers from the better-paid semi-skilled jobs, as well as all the 'skilled' ones at Edgwick, suggests that there was relatively little turnover of labour there. The stark character of racial segregation in Herbert's foundries also encourages the suspicion that these outcomes of the labour market were aided by tacit understandings between firstline management and workers that certain jobs were reserved for whites.

Williams' wage data also give some indication of the strength of racism in the "informal understandings shared by management and workers" on pay differentials in the foundries. For if the 'skilled' moulders and core-makers had difficulties in determining relativities with the semi-skilled fettlers, they experienced no such problems with the general process workers. In both 1964 and 1967, Asian workers remained very firmly at the bottom of the pay hierarchy, though they did achieve a significant reduction in differentials in that period. For example, in 1964, their standard hourly earnings at 7/1d were equivalent to 52% of the moulders' pay; three years later, at

10/3 d, they had increased to 69%. Thus, while it is quite likely that this success is linked to the more turbulent shopfloor politics inside Herberts' engineering shops during the 1960s, which are reviewed later, the indications are that in the 1950s the Asian foundry workers did little to challenge these patterns of discrimination.

There are a number of possible reasons for this apparent quiescence. First, many were recent immigrants grateful for any employment they were offered. Besides, the availability of a phenomenal amount of overtime - double shifts and regular night work - offered some compensation for the poorer piece-rates they were given. Second, if they were recruited by a small number of English-speaking Asians who acted as 'go-betweens' - one form of labour recruitment at this time - this is likely to have had the initial effect of discouraging militancy by splitting people up into small ethnic groups each dependent on one or more 'go-betweens' who had a material interest in maintaining a passivity among their 'clients'.²¹ Third, until 1967 when 121 (56%) of the 218 foundry workers were Asian, black workers probably constituted a minority of the labour force. The racist conduct of the other workers must have made them feel that they were very much an oppressed minority. There were the routine acts of harassment such as the display of racist graffiti, racist taunts, and the habitual use of clock numbers or racist tags such as "Sooty" or "Onion" as names for Asian workers. There were also, occasionally, acts of physical violence against black

workers.** In the absence of examples of protest elsewhere, it is hardly surprising that they chose to keep a low profile. Instead, they quietly joined the TGWU - rather than the AUFW to which their white colleagues belonged - and waited for better times.

Workplace politics in the engineering shops

The "factory" was a relatively small engineering shop situated alongside and "upstairs" from the main machine shop. It is probable that nearly two hundred workers were located in this building. The "factory" acquired its nickname from the common perception that it was the location of much semi-skilled, repetitive machine work in which tools and accessories were produced in batches numbering hundreds instead of tens. However, the nickname hid some basic similarities this unit had with much of the engineering work in the main building: the "factory" contained pockets of skilled labour, such as in the factory tool store; work on semi-automatic machinery, like capstans, was no more unskilled than on the same machines in the main building; and the payment systems were identical, namely, a day-rate system for the indirect workers, individual piecework for the machinists (see the discussion below), and Herbert's variant of collective piecework (the gang system) for the fitters.

Over two thousand people worked in the main building. It is

tempting to describe it as the largest jobbing shop in the world partly because, along with its size, this part of the site housed a bewildering range of productive activities. The breadth of the product range can be imagined from the fact that in 1974, shortly after a major rationalisation programme, this unit still produced 21 different types of lathes, in addition to a range of milling machines and rock-pulverising machines. There was a similarly low level of standardisation of component production. During the introduction of group technology in 1972, when the technical staff began to code over 40,000 different types of components made at Edgwick, they found, for example, 347 different screws up to 1" diameter and length, and 896 different spacer-type parts between 1" and 2" diameter and up to 1" length." The phrase 'jobbing shop' also conveys something of its occupants' self-image. Distinguishing themselves from their colleagues in the "factory", many machinists and fitters in the main building saw themselves as members of a craft elite. And yet, for many workers, the reality was rather different from the myth. For, despite the range of products, much of the machine work had long been no more than "boys' work",²² and even among the skilled workers in both the fitting bays as well as the machine shop, the stability of the product designs over the decades meant there was a considerable routinisation of production in which workers could "rap out machines" without much mental effort. Nonetheless, the undoubted craft skills of a core among the skilled workers allowed the majority to set themselves apart from the workers "upstairs" in the "factory".

Within the main shop management operated different payment systems. Most of the indirect workers - the crane drivers, storemen, labourers and toolroom operatives - were paid on a day-rate system in which earnings were supplemented by a plant-wide production bonus. Among the direct workers, the fitters were paid under Herbert's variant of the gang system, and some of the machinists - perhaps all of them - were paid under a form of individual piecework (IPW).

Surprisingly little is said in either management or union records about the introduction of IPW at Edgwick's engineering shops. As I have mentioned elsewhere, the shop stewards noted its small-scale progress across the main machine shop during the immediate post-war years. (Their minutes suggest that it took management four years to bring IPW onto as many sections.) In the late 1940s, the subject was raised at several directors' meetings. However, the absence of any written record of the system's progress in the 1950s - matched by the complete silence on the subject in the available oral evidence - prompts some interesting speculations. It could be that very few machinists went onto IPW during the 1950s - though this seems unlikely from Williams' account of the payment system he found at Herbert's in 1967 - or that most machinists felt IPW brought no major changes to their working lives because the absence of a significant number of new jobs meant they had very little to negotiate with the rate-fixer, or that, because the gang system was restored in

the machine shops after 1960, IPW literally occupied a very small part of the history of people's working lives at Edgwick. Similarly, the directors may have maintained a discrete silence because they were disappointed - or embarrassed, given the Chairman's initial opposition to the scheme - about how little had changed since the introduction of IPW. This is a neglected area of Herbert's history which deserves closer attention. All that can be said here is that the entry of IPW did not have a dramatic impact on factory politics at Herbert's.

Forms of segregation in the engineering shops

Earlier I mentioned that two recent essays by Davies and Tolliday managed to discuss workplace politics at Edgwick without any reference to the foundry complex. I speculated that this due to what I called the foundries' double marginality, that is to say, they employed a relatively small number of workers who had little influence on the politics of the rest of the site. Among Herbert's engineering workers, white women and Asian men were doubly marginal in almost the same way. They were proportionately few in number and apparently of little consequence to the trade union organisation inside the engineering shops. It is not surprising, then, that both writers give correspondingly little attention to them. In Davies' essay, blacks are invisible and women are only mentioned in situations where, along with

"handymen and boys", they were seen as a threat to the skilled workers' fragile control over pay and conditions. Tolliday acknowledges that the subject of his study - the predominantly white, male skilled and semi-skilled piece workers at four firms, including Herbert's - were "at or near the top of the tree" among Coventry's engineering workers and that women and blacks were placed somewhere near the bottom.** However, he fails to follow up this observation with any discussion on how this labour hierarchy shaped workplace politics in his case studies. This is an unfortunate omission because, as I hope to show in the course of this chapter, the marginalisation of women and blacks was very much part of the kind of politics that made the union organisation at Edgwick so ineffectual. But my first step is to discuss why, given their position within the labour hierarchy, women and Asians were so quiet at Herbert's during the 1950s.

A marginal sex

It is difficult to know how many women worked on the shopfloor at Edgwick during the fifties. In February 1946, 738 out of a total of 4429 employees (ie 17%) were female; but the stewards' minutes indicate that 199 women had left the plant in the previous twelve months and that the fall was continuing.** However, with the revival of the defence industry in the late 1940s and the emergence of a chronic shortage of labour, women were recruited once more to take the places of absent men or, ** to be more

precise, to take the places of youths who, before the War, were recruited as 'trainees' and then confined to the hundreds of semi-skilled jobs at Edgwick. From the fragmentary information available," it seems likely that some women were recruited as capstan operators in the main machine shop, which was a traditional area for 'trainee' labour. However, the scale of this recruitment drive appears to have been relatively modest. Williams' study suggests that by 1964 women represented only 4% of the manual workforce. While there is no doubt that this is a serious under-estimate, as he did not count the women who worked in the gantry cranes, in the machine wiring gangs and the packing section or the canteen workers and cleaners," nonetheless, it is obvious that during the 1950s the number of women who worked on the shopfloor at Edgwick continued to decline both absolutely and as a proportion of the labourforce. Indications that the 1950s also witnessed a rise in the average age of women who worked at Herbert's provides further evidence that the recruitment 'drive' was very modest indeed."

If women workers were an ageing population, then the security of employment this implies was an important improvement in their working conditions. Before the War, women at Herbert's, as in most other engineering firms in Coventry, were expected to leave the factory after their marriage. Women had commonly regarded waged work as an interlude between school and marriage."¹ Now it was assumed that they would combine employment with the responsibilities of raising a family. However, the other side to

this new-found job security was that it demonstrated the resilience of the processes of sexual oppression. None of those who were recruited and trained as semi-skilled machinists to substitute for scarce (white) male labour - either during the War or in the early 1950s - ever gained skilled status. Most of these machinists probably worked in the "factory" where much of the machine work was highly repetitive, with little opportunity for promotion to more skilled jobs. But, as I shall explain later, a similar group of men could not have been treated in this way without provoking serious unrest in the factory. It was a testament to the durability of sexism that this inequity was seen as unremarkable, a part of the 'natural order' of things in the engineering industry.

Similarly 'natural' was the practice of paying female machinists lower wage rates than males of comparable age and skilled status. Unfortunately, the only wage data available relate to the 1960s; but there is no reason to suspect that the situation was better during the previous decade. Williams claims that in 1964, the standard hourly earnings of women who worked as semi-skilled machinists was equivalent to 71% of that for male capstan operators and only 58% of the pay of skilled turners. According to the shop stewards' minutes, matters had not improved by 1969 when the unions negotiated a scale of base rates for female semi-skilled dayworkers which was significantly less than the rate for male labourers.²² One more point to note is that women's pay remained abysmally low not only as a result of this form of

industrial apartheid, but also because they were less likely to participate in that "great money spinner",** overtime, due to family commitments.

Obviously, women workers at Edgwick had no material interest in maintaining the status quo during the 1950s. Why, then, the absence of militant action by women in this period? Women's subordination in employment is the subject of a large and growing literature, so all that I propose to do here is sketch out some of the factors that discouraged sectional action by women at Herbert's.

Women made up a relatively small part of the manual workforce. Though restricted to a small range of jobs, they still remained a minority in sections such as machine wiring and the capstan gangs in the main shop. In other sections where the jobs were exclusively or predominantly held by women, there was either very little scope for militant unionism, such as in the "factory's" piecework gangs (more will be said later about the politics of piecework at Herbert's), or the work was regarded as peripheral to the production process, such as that performed by canteen workers, cleaners and packers. It was not until the early 1960s that the women in the packing department discovered by accident just how effectively they could disrupt production. The women who worked in the gantry cranes must have been among the few who were conscious of management's dependence on their 'goodwill and co-operation'. That is why, I suspect, they were the only ones

who enjoyed equal pay with their male colleagues.

Women were also discouraged from militant action by the absence of a tradition of female protest in the engineering industry. By and large, women had accepted their role as members of a reserve army of labour to be drafted into waged work at moments of acute need."⁴ During the War, acts of protest by women workers were frequently based on the assumption that their stay in employment was going to be short if unpleasant."⁵

The ambivalence of their male colleagues in the shop stewards' organisation was undoubtedly another factor. In 1947, before the issue became tangled up and then forgotten in national negotiations, the shop committee at Herbert's did press management for equal pay;⁶ and it is possible that this prompted the firm to make that unique concession to the crane drivers. However, the traditional view of women as a subordinate part of the workforce to be displaced when men's employment is threatened remained there too. For example, shortly after a recession which resulted in hundreds of job-losses at the end of the 1950s, the minutes record this expression of male privilege:

"Re crane drivers

it was proposed we ask management to employ
only male labour in future. This was carried."⁷

The patterns of racial inequality in the engineering shops broadly paralleled those in the foundry complex in that Asian workers were confined to the jobs least attractive to white, male workers. In 1967, Williams found black workers were excluded from all skilled jobs and those categories of semi-skilled work which, through custom and practice, provided a route to skilled status." This meant that while Asians could work as crane drivers and storekeepers, they were not acceptable as semi-skilled machinists. Also, as in the foundries, there were no black supervisors, even though all three hundred of the workers in one section of the workforce, the machine shop labourers, were of Asian origin. Similarly, Williams found that pay was commensurate with the low status of these jobs. For example, at 6/10d, the crane drivers' standard hourly earnings were equivalent to only 60% of the earnings of the lowest paid among the skilled workers, the machinists."

Given these patterns of inequality, the question that was raised in the discussion on women at Herbert's has to be asked here: why was there an absence of sectional action by black workers during the 1950s?

Some of the answers are identical to those given in the earlier discussion on racism in the foundry complex. Firstly, excessive and systematic overtime provided a way of overcoming the problem of low wage rates. For workers, like Ernie Digger, whose pay was

not determined by a low day-rate, the appetite of some Asian labourers for overtime was a source of wonder and amusement.

Ernie recalls an occasion when "old Biker Mejig" said:

"Mr Digger, I could sleep on bench. No need for me to go home. I could have food in canteen.' That's what he wanted to do."

Secondly, during the 1950s there were no examples of successful industrial action by black workers elsewhere in the country that could encourage those at Herbert's to challenge discrimination. Thirdly, they faced the same racist attitudes from their colleagues. Perhaps the character of that racism was different in degree. There is no evidence of racially motivated attacks against Asian workers in the engineering shops; and Ernie's paternalistic comments about "old Biker Mejig" - which where not, I think, intended to be offensive - are probably representative of the way a large number of the skilled engineering workers thought and spoke about their black colleagues. If this was the case, it was understandable; afterall, "old Biker" had no chance of ever subverting the master-servant relationship by becoming a machine tool fitter himself. Racism was more brutal in the foundries, I would argue, because the white workers there recognised that their control over access to the more lucrative jobs was based on nothing more than a tacit understanding with the managers.

The black workers were also confronted by a hostile shop stewards' organisation. Again, the forms of racism may have been

different from those experienced in the foundries. The hostility was usually discrete. For example, when Rajmal Singh, a machine shop labourer and the first Asian shop steward at Herbert's, took up his place on the shop committee in 1955 he was not given the customary welcome by the chairman. The shop stewards were similarly discrete when they voiced the racist anxieties of the semi-skilled. At a works conference in June 1953, Warr threatened strike action if any Asian workers were upgraded from labouring to semi-skilled machinists' jobs, and in reply the managers gave an informal assurance to maintain the status quo;⁷¹ but no part of these talks was even mentioned in the shop stewards' minutes. It was not until the Asian workers themselves challenged the colour bar that the whole matter came into the public domain - and even then the works convenor tried to place a fig-leaf over the committee's politics.

In the summer of 1961, Rajmal clashed with the committee after he wrote to management to ask about *"the possible prospects for advancement of non-Europeans within the company."* The request may have been prompted by management's exceptional efforts at that time to recruit and train semi-skilled labour and Rajmal probably wrote the letter as secretary of the local Indian Workers' Association, not as a TGWU steward; but the shop committee demanded a *"full and frank discussion".*⁷² At the following meeting the letter was duly censured and Feltham, committee secretary for the previous twelve years, formally moved that:

"It is the opinion of this Cttee that the majority of our

members would resent strongly any extension of coloured labour on to semi-skilled work other than what they are now doing."

Perhaps mindful of the adverse publicity this decision was going to receive, the convenor, alderman Warr, proposed as an amendment:

"That in opinion of this Cttee there would be no objection from the workpeople to non-Europeans with correct qualifications being accepted as apprentices.""

The duplicity of this proposal was not appreciated immediately by the other stewards. He had to wait until the committee's next meeting before his motion was approved. If Warr had feared press coverage of this issue, his worries were soon justified. In October, the local paper carried the story of Rajmal's abortive appeals to both the Trades Council and the AEU District Committee to overturn the shop stewards' decision. The same article also carried Warr's denial that there was a "colour bar" at Herbert's."

It is worth noting here that Rajmal did not attempt to organise any kind of industrial action to press his demand for racial equality. Of course, it would have been extremely difficult for him to call successfully for a strike against a decision taken by the shop stewards' committee; but that apart, I would suggest that the Asian workers would have been reluctant to take industrial action because, like the women workers, they felt relatively powerless in the production process. Confined to jobs

which serviced the direct workers and were commonly regarded as menial or, at best, peripheral, such feelings would have been understandable. However, events in the early 1960s were to demonstrate just how disruptive a strike by indirect workers could be.

Changing roles of young workers

As I argued in an earlier chapter, during the pre-war years Herbert's labour policies were based on a "vast apprenticeship system" which both (a) annually replenished Herbert's skilled workforce with a relatively small number of young men who were thoroughly socialised into the workplace culture at Edgwick, and (b) legitimated a thinly disguised form of super-exploitation that confined many hundreds of youths to semi-skilled work at low wages and with precious little job security. Herbert's chronic shortage of skilled labour - created first by the demands of the War and, later, by management's tight control over wages²⁸ - did not eliminate the worst abuses of this system by the 1950s but it did reduce their magnitude.

It seems that from the early post-war years relatively few youths were "released" by Herbert's after the completion of their training. The rarity of these events is suggested in the fact that in 1950, the dismissal of an apprentice after the completion

of his training became the subject of a works conference.

Unfortunately, the only available statistics, shown in table 1 below, relate to the period from 1965 onwards. Nonetheless, they give some indication of the level of job security enjoyed by craft apprentices prior to that date.

Table 1. Apprentice Intake and 'Releases' At Herbert's, 1965-71

	1965	1966	1967	1968	1969	1970	1971

Intake	128	144	116	54	60	94	59
Rel'd	9	16	6	1	2	6	10

Source: Herbert JSSC Secretary's minute of meeting with managers
on 27 May 1971.

The figures for the intake during 1965-67 are remarkably similar to the guesstimates for the pre-war years (Bill Elliston, you may recall, had talked about "650 lads going through the shop at any one time", and Bernard Wall had estimated "an intake of 100 apprentices a year") but continuing employment was clearly the norm.

Furthermore, tighter state regulations on vocational training, which obliged the company to send all apprentices to technical college one day each week and set up a training centre inside the plant to provide some form of induction training," limited the opportunities for the super-exploitation of this young workforce.

The available evidence suggests that premium apprentices worked on the shopfloor until the early 1960s;" but they were likely to have been few in numbers and, from the mid-1950s, may not have paid a "premium" to work at Herbert's, as senior management decided to waive that condition "if it was a deterrent to obtaining good apprentices"."

What happened to male trainees after 1945 is very much a matter of speculation. The first references to them in the available documentation were recorded at the end of the 1960s. This silence suggests the War ended the mass recruitment of youths as trainees. Young women had taken their place during the War, and afterwards management must have found it could not restore the practice to its former magnitude because of the combined impact

of national service, legislation on education and vocational training, the resumed growth of the motor industry and the gradual decline in Coventry's population growth. However, the fact that in 1968 there were still over two hundred "junior males" at the plant,²⁰ indicates that they were remained a substantial proportion of Edgwick's workforce. Given the company's chronic shortage of labour throughout the post-war period, it is probable that these white young men - like the craft apprentices - enjoyed a new-found job security and could, if they worked in the machine shop, safely anticipate the eventual acquisition of skilled status.

White, semi-skilled workers: on the escalator

According to Roger Williams' figures, in 1964, out of roughly 2,200 engineering workers at Edgwick, 706 (33%) were graded as semi-skilled. This number included 104 women machinists and some 200 storekeepers and crane drivers. Machinists made up the remaining 57% of the semi-skilled engineering workers.²¹ They are the main focus of this section; but first some comment is needed on the white men who worked as storekeepers and crane drivers at the plant.

They were day-workers and their earnings low. If Williams' data is a useful guide, and there is no reason to suspect the

contrary, their pay was roughly equivalent to 80% of that for direct workers in the same grades."² They may have experienced this as a grievance, but other factors discouraged them from taking industrial action. One factor used to explain the quiescence of the women and Asian men in these same jobs also applied to the white men, namely, their consciousness of a double marginality: that they were a small part of the workforce; and that though they could disrupt production through industrial action, they could not stop it. In addition, there were two others factors which applied to them specifically as white men. First, many were veteran Herbert employees who were, in a sense, cashing-in on Herbert's renowned paternalism for their decades of loyal service to the company by being employed, well beyond the age of retirement, in jobs that were seen as steady and undemanding."³ The extra-ordinary sense of loyalty or gratitude that these men felt - or were supposed to feel, which is equally important - is evoked poignantly in a phrase which emerged several times in oral testimony about workers "dying in harness".⁴ Second, and this applied equally to the younger white men who were recruited directly into these grades, the opportunities for promotion into supervisory posts were greatly enhanced by the growing presence of black workers in their section. In this instance, they were, or were expected to be, beneficiaries of the colour bar "informally" agreed between management and the shop committee.

Marginalised and, in many cases, the beneficiaries of Herbert's

paternalism or racism, this group of white men were unlikely to de-stabilise shopfloor politics at Edgwick. But what about that other section of white semi-skilled workers, the machinists? Why were they so quiet?

During the 1950s, the white men who worked as semi-skilled operators on milling machines, drilling machines, grinding machines or lathes, were certainly not marginal to the production process. In 1967, Williams found that they constituted one of the largest sections of the workforce at that time. The figures he was given show that they outnumbered the fitters and equalled two thirds of the skilled, direct workers.** Having accepted the conventional image of the machine tool industry as a centre of craft excellence, Williams was surprised by this finding; but the number of these workers at Edgwick, both absolutely and as a proportion of the total workforce, must have been even higher during the 1950s. Company records indicate that at the beginning of the decade semi-skilled workers outnumbered their skilled colleagues by as much as 4:1.** If the majority of the former group were machinists, as they were when Williams visited the plant, then Herbert's must have employed twice as many semi-skilled machinists as skilled workers. Given this evidence of their numerical dominance, there can be no doubt about the centrality of semi-skilled labour to the production process at Herbert's - despite the account in Davies' case study which gives a rather different impression of the composition of the workforce. This is echoed by what is reputed to be the

conventional wisdom among skilled engineering workers in northern England; that Herberts occupied the "rough end" of the industry.⁷⁷ Yet, despite evidence of their numerical and technical importance and, perhaps more significantly, despite the gains made by semi-skilled pieceworkers elsewhere in Coventry, it appears that this group occupied a subordinate position in the firm's internal wages league.

In the 1960s Williams found that the structure of pay differentials broadly reflected the hierarchy of skills, that is to say, the toolroom workers enjoyed the highest wage rates, followed by the skilled machinists, the fitters, then the semi-skilled machinists, and so on down to "women's rates" among the unskilled day-workers. In 1964, for example, Williams calculated that the standard hourly earnings of the semi-skilled millers were equivalent to 83% of those for their skilled counterparts, and 73% of those in the toolroom. While comparable wages data for the 1950s are unavailable, there is strong indirect evidence to support the claim that the structure of pay differentials was broadly the same. First, there is Williams' observation that Edgwick's shopfloor was "an ageing workforce" which had developed very strong norms on questions of pay, including differentials.⁷⁸ Second, there is the testimony of the shop stewards' minutes which show that on each occasion during the 1950s when the shop committee initially campaigned for "an all-round increase", they invariably settled on "pro-rata" pay raises. Obviously, if all these calculations are correct, they

raise some interesting questions. Why did the shop stewards for the semi-skilled machinists allow the toolmakers' representatives to retain the leadership of the shop committee throughout the 1950s when the interests of the former group was so poorly served? And why was there so little sectional activity among the semi-skilled machinists as a consequence of the shop committee's failings? Of course, exactly the same questions could be asked of the fitters and the skilled pieceworkers in the machine shop since their earnings were, as I said, significantly lower than the day-rate earnings of the toolroom operatives.

These questions are particularly interesting because in some of the other, local engineering firms the situation was rather different. As Tolliday writes:

"Toolmakers relied for their pay increases not on bargaining but on the automatic operation of the (Coventry Toolroom Agreement) and in many firms the organisation of Toolmakers became weak and quietistic. The highest paying piecework firms paid their Toolmakers much less than their pieceworkers but came under almost no pressure to remedy this."

I propose to tackle this anomaly in the next section by looking at the common experiences of the skilled and semi-skilled pieceworkers inside Edgwick's engineering shops. However, before concluding this section, some comments should be made about one aspect of work experienced by the white, male semi-skilled machinists in the post-war years which encouraged them to

identify more closely with the skilled elites than with the women machinists and the Asian men who worked in the other semi-skilled occupations, namely, the opportunities for re-grading.

The vast majority of the male semi-skilled machinists at Edgwick could, in common with labour practices at other engineering firms in Coventry, expect to gain skilled status in five years or less. The shop stewards' minutes record that ball bearing drillers were "the only grade of (male) direct machinists who (did) not automatically have the opportunity of progressing directly through the semi-skilled grades to a skilled grade."¹⁰ To a large extent, re-grading depended on the attitude of the workers' immediate supervisors; but the union records provide testimony to the strength of the conviction among adult, male semi-skilled machinists that they had a right to that chance. These high expectations were justified because Herbert's chronic shortage of skilled labour virtually guaranteed re-grading for those prepared to stay with the firm. This is reflected in data which indicate that a major change in the ratio of semi-skilled to skilled labour took place during this period: from 4:1 in 1952 to 1.2:1 in 1960.¹¹ Therefore, it would seem reasonable to suppose that this particular section of labour would have been less concerned about pay differentials based on skilled status than those kept off the skill escalator (though the evidence suggests that the pay differentials between the male skilled and semi-skilled pieceworkers were anyway less marked than those between the skilled elites and the women and Asian semi-skilled workers).

Skilled and semi-skilled engineering pieceworkers at Edgwick:
common experiences

To explain how the common experiences of skilled and semi-skilled engineering pieceworkers offered little succour to militant unionism, a useful starting point is Tolliday's article. Though his case study of Herbert's is brief, it touches on most of the key issues.

In the case study, Tolliday partly attributes the marginal position of the unions to a combination of factors: management's determination to run a "classic anti-union paternalist shop"; the regularity of employment (which contrasted with the marked, seasonal nature of work in the motor industry); and management's "unadventurous approach to product innovation" which provided few opportunities for workers to raise earnings through piece-price bargaining. I would contest none of these points. But, Tolliday does not consider the political impact of the distinctive features of the social and technical organisation of work in the machine tool industry (a curious omission since Herbert's was the only machine tool plant in his four case studies); his account of the firm's "idiosyncratic payment system" misses the mark in several important respects;" and there is no comment on the fact that Herbert's toolroom operatives did not conform to his

generalisations about the toolmakers in Coventry's engineering industry. This section will explore these claims as a way of trying to explain the "somnolent" character of the shopfloor organisation during Warr's term of office.

Unlike the three motor firms in Tolliday's study, but in common with most machine tool factories at that time, the production process at Edgwick was highly fragmented. Thousands of different types of components were machined and assembled in small batches and, because of the layout of the plant and machinery, transported many miles back and forth across the shopfloor in the process. Machines were grouped together by type and not according to their function in the production process. In addition to the costs of internal transport, this layout increased management's already considerable difficulties in synchronising production. Inevitably, this resulted in long lead-times and a high volume of work-in-progress which incurred more financial penalties. However, it had some saving merits for management. It was easier to organise work-loads for individual machines and obtain certain economies of scale. Compared with group technology, supervision under this system was also a relatively simple task. In addition, it created a difficult terrain for workplace organisation.

By splitting the workforce into separate skill groups, the organisation of work fostered divisions between workers. The material basis was there to encourage a sectional consciousness as opposed to a factory consciousness. This form of organisation

also made it difficult (if not impossible) for any one section of the direct workers to effect an immediate disruption of production. The fitters demonstrated this lesson later, in 1968, when a 5 week-long strike by their shop - involving over 100 workers - caused management to lay-off no more than 150 operatives across the rest of the factory; but this point was even more relevant to the semi-skilled pieceworkers in the machine shops. Unlike some of their skilled colleagues, they could not always rely on the labour market to keep their pay close to the district average; and unlike the track workers in the local motor firms, they could not threaten powerful sanctions to press their sectional interests. They needed an alliance with the skilled workers. Indeed, one strategy that was open to them was to depend on the skilled elites, particularly the toolmakers, to secure pay rises which then became the subject of claims over differentials. This point will be considered again when I discuss the dominance of the toolmakers at Herbert's.

Earlier, I claimed that a second flaw in Tolliday's study of factory politics at Herbert's was his discussion on the firm's "idiosyncratic payment system". I would suggest it contains three errors. First, it misconceives the politics of the gang system. Second, it misunderstands why this form of piecework resulted in low productivity in the post-war years. Third, there is no reference to Herbert's experiments with individual piecework between 1945 and 1960, though this system probably covered all the semi-skilled, engineering pieceworkers during the 1950s.

Tolliday argues that, in contrast to the local motor firms, Herbert's management kept firm control of the shopfloor. This gives a misleading impression, however, for any control they exercised arose on a quite different footing from the strenuous efforts made by such firms as Ford to gain accurate measurements of, and secure detailed control over, the labour process. Despite some reforms at the end of War, piecework prices at Herbert's remained "extremely phoney" and, as late as 1967, Williams found the rate-fixing department distinctly ill-equipped to remedy that situation:

"The personnel...are all from the shop floor. Not one has had any formal training in work study techniques. The stopwatch is very rarely used on the shop floor and prices are generally agreed by a straight-forward bargain between the rate-fixer and the chargehand."

Instead, I would argue that while management had a hard, authoritarian "style" on questions of work discipline, the control of work itself was delegated, as far as possible, to the chargehands. This is an important distinction, particularly when, as in Tolliday's case, the analysis of factory politics at Herbert's hinges on an account of the firm's variant of the gang system.

Under this form of collective piecework, the chargehand was responsible for the allocation of work, supervision, and the negotiation of piecework prices. He also had a major influence on

recruitment and dismissals within his gang, though, of course, he had no formal powers in this area. Furthermore, his financial responsibilities to the gang went much further than Tolliday's brief account implies. In addition to negotiating job-prices with the rate-fixer, he was expected to keep a record of work completed over a given period and ensure a stable and high level of bonus earnings from month to month. Often this involved the quasi-covert practice of keeping a kitty - getting the rate-fixer to put aside some money when bonus payments were high to supplement lower earnings at other times - or, more rarely (partly because it was a dismissable offence), booking unfinished work.

In an earlier chapter," I identified some of the advantages management had gained from this form of piecework. Firstly, it offered some of the benefits associated with internal sub-contracting, namely, it was a delegated mode of control which generally reduced the costs of production control and labour administration, and provided a route for the upward mobility of key workers. Secondly, it had facilitated the exploitation of youth labour which had formed such a substantial section of the workforce before the War. Thirdly, it was a system which encouraged every man to be a 'supervisor' to his colleagues and, because the bonus was shared out unequally with the actual supervisor receiving the largest portion, gave that person a direct interest in increased production. Indeed, as I mentioned in chapter four, when Schloss described such a system in 1892,

the concern was that, unless certain checks were imposed, the chargehand became "a bully and a sweater": forcing the pace regardless of workers' health and safety; producing "scamped work"; and deceiving the employer about the amount of work produced. To keep these excesses in check, Schloss advised employers to appoint "superior officials" who were "in receipt of fixed salaries"; in Herbert's case these "officials" were foremen and inspectors. Fourthly, it was technically suited to specific elements of the labour process, such as fitting, where the calculation of individual piecework would have been "special, elaborate and troublesome". Lastly, the gang system aided management in keeping down labour costs without provoking serious oppositional activity among the pieceworkers. As I argued in chapter 4, workers were divided by the hierarchies within the gangs as well as between them; the tensions created by the low wage policy were frequently mediated through the chargehands - Ernie Digger, for example, complained that he "had kicks from anything between 10 and 20 men, plus kicks from the foreman and manager" - and, by keeping together the formal and informal systems of job control, it limited "the potential for the emergence of rival work-group leadership, such as...shop stewards".

Tolliday's failure to grasp the distinctive politics of this form of collective piecework leads him into errors about its effect on productivity. He argues that the gang system "had little to do with incentives" because the pieceworkers were excluded from the

pay bargaining process and, through a complex grading system which individualised earnings, "the main beneficiaries seem to have been the chargehands and the skilled workers"."

These are plausible arguments; but they are not strongly supported by the evidence. First, during the 1950s the gang system was confined to the fitting shops, so it unlikely that all but a few semi-skilled pieceworkers could have been exploited in this way by their skilled colleagues. Secondly, instead of cherishing a deep resentment at their exclusion from piece-price pay bargaining, there is considerable evidence to support the claim that many pieceworkers did not want to solve its mysteries. They were content to let their chargehands assume this responsibility so long as the bonus payments remained stable and at a level they regarded as fair. This would explain why, when given the chance through an agreement reached in 1966, workers in only 14 out of 78 gangs exercised their right to have a gang member be present during pay bargaining between the chargehand and rate-fixer."

The conditions which made Herbert's variant of the gang system viable as a form of labour management in the past had considerably weakened by the 1950s. Firstly, the opportunities for employment elsewhere in Coventry made skilled pieceworkers less tolerant of any bullying tactics. Secondly, the opportunities for the super-exploitation of youth labour - which provided all the adult male pieceworkers with an interest in the

unequal division of the gang bonus - were increasingly limited after the War: Herbert's no longer attracted young workers in the numbers experienced before 1939; there were new government controls on vocational training; and the company needed to ensure that enough apprentices gained sufficient training to replenish its skilled workforce. Thirdly, and perhaps most importantly, the system offered little real incentive, but for reasons other than those emphasised by Tolliday. The collective piecework system was supposed to be a form of payment-by-results which, to operate effectively, required the chargehands to show that increased effort resulted in bigger bonuses. Yet, since senior management appeared more concerned about keeping control over labour costs than encouraging increased production, there was little scope for this form of incentive. To retain their skilled employees in a tightening labour market, the managers discovered they were compelled to keep piecework earnings close to the district average, but because of Sir Alfred's fierce opposition to higher job-prices, this had to be achieved, principally, through increases in the shop bonus - the Alfred Herbert Award - and systematic overtime. As the former caused piecework earnings to become a diminishing proportion of workers' pay - both under IPW and the gang system - and the latter practice encouraged workers to pace themselves, it seemed inevitable that these 'solutions' would transform the gang system into a weakened form of piecework which resulted in relatively low productivity.

Effort in many of the skilled jobs was extremely difficult to

measure. Williams relied on subjective impressions - he thought the work pace "looked" slower than at Wickmans - and such indirect evidence as the fact that scrap and rectification costs varied between 1.6% and 2% of total direct wages compared to 8-10% at Wickman's.** Other, soft evidence of this unhurried approach to work is suggested by Vic Brown:

"You had to keep at it...but you didn't have to rush to sacrifice a job, you know. It had to be done dead right...nothing bodged up or anything. It had to be done dead right."

The available evidence indicates that senior management recognised this problem at a very early stage. Some attempt was made to introduce individual piecework in 1942; but it collapsed quickly for reasons that are not entirely clear and it was not until 1945 when a more determined approach was adopted. By the 1950s, it seems, an IPW system covered all the pieceworkers in the two machine shops; and so it remained until 1960 when the gang system was suddenly restored across the plant.

Despite the apparent scale of these changes, Tolliday's silence on the IPW interlude is understandable. There is only passing reference to it in Williams' study, and even the primary documentary sources say remarkably little on the subject. However, it is an unfortunate omission as the story provides further evidence that the gang payment system was not the crucial feature of factory politics at Herbert's.

As I mentioned in the previous chapter, the initial signs suggested that senior management envisaged major reforms in labour relations through the introduction of IPW: the production director argued for a policy of higher productivity through higher wages and higher supervisory costs; and Sir Alfred himself complained that the old system had become "merely day work plus a bonus". However, it seems that other arguments about achieving economies through the elimination of "excessive claims" and hidden "subsidies" soon prevailed in the boardroom - with predictable consequences for the pace and character of the changes that took place on the shopfloor over the next four years.

The shop stewards' minutes suggest that it took a full year to put the first section, Bar Lathes, onto IPW. Surface Grinding followed in January 1947 and then Factory Bar Lathe later that same year. The changeover for Chucking did not come until nearly two years later. As the new payment system was inched across the shopfloor, it must have become apparent to the pieceworkers that despite their new-found role in piece-price bargaining - matched by a decline in the chargehand's authority - they would gain few tangible rewards from the changeover to IPW. A combination of management's determination to resist any form of internal wage drift and the relative scarcity of new product designs made sure of that. Essentially, it seems to me, the reforms meant no more than the substitution of one weakened piecework payment system

for another. Instead of chasing higher earnings through greater productivity, it is likely that the severe constraints imposed on the new system encouraged workers, as in the gang system, to develop strong norms over the effort bargain as they became accustomed to achieving a certain level of earnings without much mental and physical effort.

There is no evidence that this outcome of the pay reforms disturbed senior management. Taking their cue from the Sole and Governing Director, the managers seemed prepared to accept low productivity as a consequence of the wages policy. (Complaints about the rate-fixing department persisted, however, and I would speculate that this prompted the decision to close the IPW experiment in 1960. With a few, modest improvements in the product range coming through, a return to the gang system made the best use of an inadequate organisation and provided a cheap and convenient way of pricing the new jobs.) During the 1950s, particularly the first half of that decade, management's tolerance of their employees' unhurried approach to work was understandable. If the work rate was low, it only meant that the customers had to wait a little longer for a Herbert machine; and if they grew tired of waiting, it hardly mattered as there were many more prepared to join the queue. This mood of complacency - the product of an economic boom that, for Herbert's, had stretched across three decades - characterised this aspect of factory politics and provided the dynamic for that relationship between managers and engineering pieceworkers at Edgwick. Phil

Banks-Price, a former manager, expressed it this way:

"If you can make a thing and sell it at a reasonable price and a reasonable profit, and the people who are making it are used to making it, and it doesn't require much effort on their part - they can rap them out quite nicely, they've got everything weighed up with regard to piecework prices and that - it's a hell of a job to change it, you know."

A third flaw in Tolliday's argument is the failure to observe that the toolmakers at Herbert's did not conform to his general statement that "in many firms the organisation of toolmakers became weak and quietistic" because they could rely on the automatic operation of the Coventry Toolroom Agreement (CTA) to secure their pay increases. The situation at Herbert's was not so simple. It is probably true that the toolmakers became increasingly 'separatist' in their outlook towards the other engineering sections at Edgwick, especially after they went onto a daywork system in 1950 - an event which signalled management's (tardy) recognition of the incompatibility of Herbert's piecework systems, both collective and individual, with the operation of the CTA. Also, it is certainly true that the toolmakers embarrassed their section representatives on several occasions during the 1950s when they refused to participate in industrial actions - or, more accurately, token demonstrations - organised by the shop committee. But it is also clear that for much of the post-war period, and most especially during the 1950s, their section stewards dominated the shopfloor organisation at Edgwick,

and that until the mid-1960s the section itself remained a major power block in shopfloor politics. This area is worth some exploration, not only to correct Tolliday's account, but also because an examination of the toolroom's dominance provides one more key to understanding the distinctive character of unionism at the plant.

Herbert's toolmakers did not conform to Tolliday's generalisation for two reasons. Firstly, their recent history had not encouraged them to be "quietistic". Secondly, they were placed in a dominant position through their status as a skilled elite in a plant where the craft ethos (Coventry-style) was particularly strong, through their union representatives, and through the political impact of the CTA on Herbert's tight wages policy.

As Tolliday reminds us, management ran a "classic anti-union paternalist shop" until the mid-1960s. Herbert's grudging tolerance of workplace unionism in general, and fierce hostility to the CTA in particular, meant that the toolmaker could never rely on "the automatic operation" of any agreement to secure the pay and conditions they regarded as legitimate. During the War, for example, they had experienced a prolonged industrial conflict over the employment of female dilutees in their section. Immediately after the War, they found management extremely reluctant to remove a male dilutee. Relations later improved, but it is significant that the toolmakers had to wait until 1950 before they were put onto day-work. Given these and other

examples of management's approach as "hard gaffers", the toolmakers must have felt that they could not afford to become "quietistic".

Also unlike toolmakers in many local engineering firms, those at Herbert's remained a dominant influence on the shopfloor long after the signing of the CTA. Earlier, I attributed this to several factors including the strength of what I called the craft ethos. The notion of the 'craft ethos' at Herbert's is inevitably somewhat vague, for it is an attempt to put a label on the way engineering workers, both inside the factory and outside in the local community, felt about the character of the production process at Edgwick. It represents a confusion of ideas about skilled work itself and also about the "quality" of Herbert's products - for many 'skilled' workers, I would suggest, gained their craft pride primarily through their association with the product rather than the process.

In other engineering centres, Herbert's may have been dismissed as occupying the "rough end" of trade, but there is no doubt that many local workers felt the plant was a centre of craft excellence. In part, this contradiction can be explained by the general character of engineering work in the city. Coventry was a major centre of the light engineering industry, and probably contained the greatest concentration of motor production in the country. In these factories the vast proportion of the work was semi-skilled in nature. Against this general picture, it is not

surprising that many people viewed work at Herbert's as highly skilled. Besides, this image was not totally misleading. In comparison with the motor firms in Tolliday's case studies, Herbert's toolroom was proportionately much larger than average. Indeed, during the 1930s management claimed that it possessed the largest toolroom in the country, employing several hundreds in that section. It seems that this claim was based on a very wide definition of toolroom work - subsequently the financial implications of the CTA persuaded management to seek a much narrower definition - nonetheless, it is probable that twenty years later there were still 80-100 toolmakers at Edgwick. This reflected the fact that the production process was far more craft-based than at Rootes, Jaguars or Standards. Probably as much as 40% of Herbert's pieceworkers had skilled status, so the toolmakers represented a sizeable elite within an elite that was, itself, comparatively large.

Linked to their status as craft workers, the toolmakers were also regarded as the custodians of trade unionism in the engineering industry. In an earlier chapter, I described the leading role played by the toolroom in reviving the shopfloor organisation at Herbert's in the 1930s, and how, during the War - despite the departure of their more militant activists - the toolmakers maintained their dominance through new section stewards, such as Warr and Feltham. Even the crisis that overtook the shop committee in the immediate post-war years seemed to enhance the toolroom representatives' authority as this gloomy period

coincided with Warr's temporary withdrawal from shop committee politics. When he was re-elected as works convenor at the end of 1951, it must have been interpreted as a sign that the toolroom intended to resume its customary role as the moral leadership of the workplace organisation. Of course, it cannot be assumed that, through their representatives, the toolroom's interests directed the twists and turns of the committee's policies. As I indicated earlier, the senior stewards did not always pursue objectives that matched the sectional interests of their immediate constituency. However, it is reasonable to assume that the toolmakers took advantage of the fact that their section stewards were the only ones who could take up grievances with management during company time, and that their specific interests and general perspective on factory politics would carry considerable weight with the senior stewards and, consequently, with the shop committee as a whole.

Perhaps most important of all, the toolmakers dominated factory politics at Herbert's by virtue of the fact that they were the only section of engineering workers to escape the full effect of the firm's wages policy, for the CTA made them Edgwick's pay leaders. This had particular relevance to the skilled and semi-skilled pieceworkers. All the problems of sectional organisation discussed earlier made it an extremely unlikely prospect for any one group of employees to breach Herbert's tough pay policy through industrial action. Instead, it was easier for the skilled and semi-skilled pieceworkers' representatives to

exert collective pressure to ensure that the shop committee negotiated for 'pro rata' increases based on pay rises the toolmakers had secured through the CTA. Similar organisational difficulties, together with pressure from the coalition of pieceworkers, must have persuaded the other sections lower down the labour hierarchy - the crane drivers, storemen, labourers and women workers - to bend to the inevitable. Thus, on each occasion during the 1950s when the committee 'campaigned' for "an all-round increase" to end low pay at Herbert's, the final settlement involved "pro rata" rises.

In the mid-1950s, the hegemony of the toolmakers must have seemed a permanent fixture of factory politics at Edgwick. The mass resignation of the committee's executive in 1956, prompted by the toolmakers' rejection of a deal fixed up by the works convenor, demonstrated simultaneously the sectional power of the toolroom and the autocratic attitude of a senior steward who 'happened' to be a toolmaker as well.** It was one more illustration of a political tradition that seemed to stretch back to the 1930. However, their dominance rested on an alliance that was not as enduring as it often looked. Some changes that took place during the 1950s may have favoured the toolroom's dominance. In particular, the rise in the proportion of engineering pieceworkers who secured skilled status is likely to have caused a similar rise in the support for traditional craft union tactics (which encouraged pay bargaining on an individual basis within the context of a district organisation) and reliance on

toolmakers as the pay leaders. But other changes threatened the status quo. Though few figures are available, it seems the toolroom continued to dwindle in size during the 1950s. By the end of the 1950s management was about to terminate the IPW experiment and restore the gang system across the two machine shops. Lastly, and probably most importantly, a trade recession towards the end of the decade made it apparent that the interests of the skilled pieceworkers and day-workers were being protected at the expense of the semi- and unskilled employees, and that the representatives of the skilled workers were unwilling or unable to effectively protect the interests of the semi-skilled. The next section will look at this particular episode in some detail.

The Redundancy Crisis and Shifts in Shopfloor Politics

As early as August 1956, major redundancies in the local motor firms prompted a debate among the shop stewards about the likely impact on jobs at Herbert's. But the minutes conveyed no sense of urgency and it was not until October 1957, when news came of redundancies at another local machine tool firm, Wickman's, that the shop committee began to consider what action to take. Even then the tactic chosen - writing a letter to the Confed asking for a meeting on the machine tool industry - seemed remarkably diffuse in its objective.¹⁰⁰ This reflected the peculiarity of the crisis at Herbert's. There had been no redundancies at the plant

by that time and there were none for the remainder of 1957. It seems that the voluntary departure of several hundred workers through 'natural wastage' - prompted, no doubt, by major reductions in overtime - had enabled management to avoid issuing any dismissal notices thus far. However, as the recession deepened, even this rate of job-loss was deemed insufficient and, on 8 January 1958, management announced the first of many dismissals.¹⁰¹

Despite the early warnings, when the crisis finally broke the shop stewards were still without a plan. Earlier, they had called on the Confed to "get a report from all machine tool factories before calling a meeting and asking the MPs to attend"¹⁰² and had agreed to "review" the situation on a monthly basis;¹⁰³ but, ignoring advice from the new TGWU district, Harry Urwin, "that the shop floor was the best level of approach and that works conference seldom succeeded in these matters.",¹⁰⁴ the shop committee remained bereft of any ideas that drew on its own resources rather than depended on external agencies, such as the Confed and the House of Commons. As the crisis unfolded, and the workforce continued to decline - in January 1957 the total workforce numbered 4386, two years later it had dwindled to 3347¹⁰⁵ - the shop committee remained ineffectual. Telegrams were sent to Transport House and the Ministry of Labour,¹⁰⁶ more appeals were made to the Confed to organise a meeting of shop stewards in the machine tool industry;¹⁰⁷ but the call for a one-day strike, proposed by Raj Singh, one of the TGWU stewards,

was out-voted.¹⁰⁰ Instead of co-ordinating shopfloor resistance to management's plans on the basis of the Confed's minimal demands of no redundancies where short-time working was viable, the committee only "approved" or "deprecated" the actions of individual sections when they respectively supported or rejected the Confed's policy. Instead of attacking the miserable levels of severance pay - three weeks wages for those with over ten years service, for example¹⁰¹ - the senior stewards brought managers into committee meetings on two separate occasions in an effort to demonstrate a common concern about the crisis.¹⁰²

Despite their customary brevity, the stewards' minutes provide enough detail to illuminate the difficulties the shopfloor organisation faced, and so enable the reader to identify some of the reasons for the committee's inaction on the shopfloor.

It is clear, first of all, that the impact of the crisis on the shopfloor was extremely uneven. Some sections of the machine shop and foundry were quickly plunged into either or both short-time working and redundancies. Other sections, such as machine wiring, continued to experience systematic overtime throughout the crisis.¹⁰³ This situation would have challenged the efforts of stewards within a highly organised workplace; but for an organisation marginalised by "hard gaffers" and kept permanently weak by a dependance on a powerful district organisation, a tight labour market for skilled workers and individual bargaining skills, the project was virtually impossible. Furthermore, it is

apparent that the redundancies had a direct and damaging impact on the committee's frail structure: appeals for new representatives were made¹¹¹ as the turnover of section stewards rose from 29% in 1957 to 62% in 1958 and 68% in the following year; and in 1958 elections for committee chairman had to be held three times. The recession also prompted a major political crisis within the committee when, as I have already noted, the shop stewards found it increasingly difficult to raise funds through voluntary contributions from their membership (though, as shall be claimed later, the resulting split proved very convenient for the senior AEU stewards). However, the union records do not illuminate one factor which must have been the principal reason for the shop committee's ineffectual stance on the redundancies, namely, the conflict of interests between the skilled workers and their semi- and unskilled colleagues over the issue of short-time working. For that insight the reader has to turn to the directors' minute books.

Notwithstanding their 'tough' attitude towards the unions, it seems that during 1958, the managers did not challenge those sections which supported the Confed's demand for short-time working before, or as an alternative to, redundancies. However, there is no evidence that this managerial inaction was motivated by anything other than the justifiable fear that, after the recession, the firm would find it extremely difficult to attract back its former employees, especially the more skilled workers who could secure better-paid jobs elsewhere relatively easily.

Unfortunately, it seems that short-time working did not achieve the aim management desired. On 2 December 1958, Sidney Muirhead, then works director at Edgwick, informed the Board that despite further cuts in production which had resulted in four-day working in the foundries, machine shop and Factory, and continued redundancies - "69 people left the works last month, 32 being wastage and 37 redundant" - the plant was now "very short of skilled labour".¹¹³ Two months later, senior management came to the conclusion that, instead of helping to "hoard" skilled labour, short-time working was largely responsible for the voluntary departure of these workers. The consequence of this new insight was predictable. On 18 February 1959, the new Chairman of the Board, Colonel Clark reported:

"Short-time working had to be withdrawn as many skilled workers had obtained other employment (with) members of the Employers' Association."¹¹⁴

Clark argued that these unfriendly acts by fellow employers would necessitate a "review" of Herbert's "responsibilities to the Association in respect of the (eventual) re-employment of this labour". More importantly, he also recognised that the decision to end short-time working would result in "further redundancies in due course".¹¹⁵

The decision to revoke the sectional agreements on short-time working could not have surprised the senior stewards. They must also have realised that management's intention was to retain a relatively small number of skilled workers chiefly at the expense

of a larger number of their semi- and unskilled colleagues. Yet no attempt was made to win broad-based opposition to management's plan. Instead, when the end of short-time working was quickly followed by the announcement of a further 46 redundancies, the senior AEU stewards persuaded the committee to "agree that the Negotiating Committee take up relative points on Redundancy or S/T working when they arise".¹¹¹ It was a formulation that effectively confused and dis-organised the semi- and unskilled. Without direct evidence, it cannot be claimed that this was deliberately intended. What can be said is that it was a convenient outcome for Warr and the senior AEU stewards whose immediate constituents were workers who would have given the strongest support to management's unilateral decision on short-time working. Similarly, there is no evidence that the senior stewards manipulated events over the membership levy controversy to ensure a split in the shop committee from July 1958 to January 1959; but, again, the outcome must have been convenient. The exclusion of the TGWU stewards from committee meetings effectively ostracised the chief advocates of a shopfloor campaign during a crucial moment in the redundancy crisis; and the consequent reduction in attendance figures - basically, the numbers were halved - also provided the AEU stewards with a ready-made excuse for the committee's inaction.

The redundancy crisis of 1958-59 demonstrated that the senior AEU stewards were unable to break through the narrow sectional interests of the skilled elite and defend those of the majority

of the membership. Consequently, it shook the domain assumption in factory politics at Herbert's that the interests of the toolmakers (and other fragments of the skilled elite) broadly coincided with those of the majority of the membership. That assumption received a further blow in 1960 when the senior stewards agreed to the restoration of the gang piecework system in the machine shops.¹¹⁷ The deal created a new supplementary bonus, called the Special Alfred Herbert Award; but this was only intended to guarantee the earnings of those who had been high-fliers under IPW, principally the chargehands and a few skilled machinists.¹¹⁸ Remarkably, it seems that the semi-skilled gained nothing from this agreement to compensate for any loss they may have incurred as a result of the restoration of the chargehands' authority to negotiate all job-prices.

I would argue that the redundancy crisis also signalled the end of Herbert's traditional style of management. The long boom was over and the employees were reminded that the myth of 'jobs-for-life' had always been contingent on economic circumstances. Later, only months later, the managers dismantled another feature of Herbert's employer-paternalism: the non-contributory pension scheme for the shopfloor. It has been claimed that this decision effectively wiped out all the contributions for employees under 37 years of age,¹¹⁹ if so its political impact across all sections of the shopfloor is not hard to imagine. (There is some evidence to support this claim in the minutes for September 1960 which note, albeit rather tersely, the

opposition of some stewards to management's new pension scheme.)¹²⁰

The toolmakers' dominance of the shop committee did not survive these changes for long. At the end of the decade, Herbert's began re-employing large numbers of those dismissed a year before or even later. Ron Doughty was among those called back. He returned, probably like many semi-skilled machinists, with a smouldering resentment at his treatment by management and some suspicions about the role of the senior stewards. As a veteran opponent of Warr's corporatist approach to factory politics, Ron had strong personal reasons for espousing a conspiracy theory to explain his dismissal in 1959. On his return in May 1960, he immediately resumed that oppositional role in the shop committee; but this time he could no longer be marginalised as an occasional nuisance and embarrassment. He quickly found allies on the shop committee in his challenge to the leadership. In part this was due to the factors outlined above. It has also been suggested that it was because he offered a clear alternative to "cadger" Warr's style of leadership. As Vic Brown put it:

"Ron Doughty was...what's the word I'm looking for? Freddie Warr was flexible and Doughty stuck to the rules. Freddie Warr was a cadger. He would give a bit to get a bit. Doughty wouldn't, you know. He was straight down the line."

At any event, Doughty's successes came quickly. In February 1961, he replaced Feltham as committee secretary,¹²¹ then in November he was elected works convenor and thus ended Warr's

eleven-year-long period of office.¹²²

A 'palace revolution'

Though he was a semi-skilled grinder, Doughty's election was not a sectional triumph for it did not fundamentally alter the fabric of workplace politics at Edgwick. Nonetheless, his success must have given particular encouragement to the semi- and unskilled workers in the plant. Thus, when, shortly after the election, a series of strikes by clerical (and semi-skilled manual?) workers disrupted production in some of the local engineering factories, Herbert's management must have expected some kind of industrial action from those same sections within Edgwick's workforce. But I doubt whether anyone anticipated the size of the strike wave that rolled through the plant.

At first, the strikes were very limited affairs, both in terms of the numbers of participants and their duration. On several occasions in April 1962, the pinkers and sprayers struck for more pay - though only for a few days each time and never long enough to cause any lay-offs.¹²³ In May, 23 storekeepers went on strike for two days to press their pay claim.¹²⁴ But then, in September that year, 140 shop clerks - progress chasers, stock control clerks and storekeepers - walked out, demanding an end to the merit award system and an increase that would reduce the widening

differentials with the production workers.¹²² They did not return "for meaningful talks" until 39 days later, by which time about half of the shopfloor was laid off.¹²³ A year later, 39 shop clerks in the despatch department stopped work over the demand for a closed shop.¹²⁴ This strike lasted 70 days. During that time, it was reported, a third of the hourly-rated workforce - principally the semi- and unskilled day workers - had either joined the strike or been suspended for taking sympathetic action.¹²⁵

Apart from the effect on production, the psychological impact of the packers' strike on management must have been considerable, as Phil Barnes' rather acerbic comments about these workers suggests:

"The women in the packing department were just in TGWU - the scrubbers' union - and one woman was a shop steward. She had a big mouth. And one woman wasn't in the union. (The steward) went and told her that she'd got to be in the union. Well, the silliest thing you can do is to tell a woman she's got to do something. Of course, she turned round and told (the steward) that she'd please herself..."

"So, eventually, the women walked out. And that went on for 13 weeks, you know. You'd be surprised how that disrupted work. Couldn't get the stuff away. Foremen, managers, anyone, were working in the packing department..."

"All I was concerned about was that I was getting complaints from my customers. I used to write back, telex back, saying:

'Regret strike action in the packing department.' They were only a load of scrubbers anyhow, this lot, but they did cause some disruption."

In addition to these strikes, other forms of industrial action taken at about that time demonstrated that a new mood was stirring among the semi- and unskilled dayworkers. For example, in April 1963, TGVU workers refused to unload an Umbrako lorry because it was driven by a strike-breaker from that firm.¹²²

On a few occasions, this new mood touched even the skilled workers, though it seems the effect was hardly dramatic. For example, in April 1962, the test bay workers rejected a review of merit payments as a response to their wage demands.¹²³ Just over a year later, anger in a fitters' gang over piece-prices encouraged the section stewards to raise the demand for a veto over piecework prices;¹²⁴ and during the shop clerks' strike in October that same year, the repair fitters narrowly voted against strike action over their pay claim.¹²⁵

The evidence, such as it is, also indicates that despite the unprecedented scale and character of the dayworkers' strikes, those directly involved usually gained very little benefit from them. The immediate outcome of the packers' strike, for instance, was a doubtful commitment by management to "favour" all employees being members of a trade union; and in the wake of all the other incidents, there may have been a general increase in union

membership in some sections. Williams' study indicates that some women workers enjoyed a modest improvement in pay over the next few years. Between 1964 and 1967, the standard hourly earnings of female machinists rose by 2/3d to 8/4 d - 3d more than the income of male labourers though this still only represented 76% of the lowest rate for male semi-skilled machinists. If the Asians reaped any gains, they were less tangible. Certainly, there were no improvements in pay; though it is possible that the shop committee's decision to request the reinstatement of an Asian worker who was probably the victim of a racial attack was linked to Asian participation in the strikes.¹²³ Again, despite this upsurge of militancy, it is also evident that key features of shopfloor politics were unchanged.

On the surface it seemed the strikes had merely disturbed temporarily the "somnolent" character of factory politics at Edgwick. Over the next four years only one sectional action - by foundry workers - was recorded in the minutes; none was recorded in the local press. Despite its new left-wing leadership, the shop committee organised no factory-wide demonstrations over pay. Ironically, after 1966, its new politics may have even contributed to this apparent inertia when a Labour Government imposed a wage freeze, for the convenor used all his persuasive skills to pledge his committee's loyalty to this measure.¹²⁴ It was also clear that the strikes did not cause a shift in the locus of power or influence within the shop committee from the skilled to the semi- and unskilled workers. I would suggest that

all this was because of the identity of the new militants.

The upsurge in industrial action was not a 'revolt' of all the semi-skilled workers. The records suggest that, apart from the pinkers and sprayers, the semi-skilled pieceworkers 'slept' through it all. Perhaps this was because of the 'escalator effect' of custom and practice which, in Herbert's circumstances, virtually guaranteed their rise to skilled status, to occupations where, as I shall later argue, workers had little cause to support militant action in those early years of the new union regime. But whatever the reason, there is no doubt that the hundreds of lay-offs, the massive disruptions to both production and distribution at the plant were caused not by white, male semi-skilled machinists, but, among the manual workers, by white women workers and Asian daylabourers.

Before the strikes, these two groups had occupied the lowest levels of the labour hierarchy and were, politically, the most peripheral elements of the labour force. As they were isolated from the other semi-skilled workers during the strikes, it is not surprising that, afterwards, their situation should remain unchanged. In the case of the Asian workers, it seemed that the politics of their oppression remained as powerful as ever. For example, in November 1965, when it seemed probable that more black workers would be recruited to ease the firm's desperate shortage of labour, racism re-surfaced in the union records. They read, somewhat cryptically:

"INIGRENT LABOUR - REQUEST GONE TO COY"***

Two months later that request was plainly (mis)spelt out at an Annual General Meeting:

"RE COULER INIGRENT'S COY WOULD NOT ACCEPT OUR PIONTS NO
MORE WAG"***

I have already suggested why the semi-skilled engineering workers were 'somnolent' at this time. Given the fragmentary character of the available information, the reasons why the skilled sections also stayed relatively untouched by these stirrings of militancy can only be guessed. From Williams' study and from a few entries in the union records, the following story is suggested.

At the start of 1960, the internal transport workers went on strike for an "all-round wage increase".¹³ Warr persuaded them to return for negotiations on a new wage structure. Then, in March, the skilled workers gained a sizeable pay increase which brought their average rate close to the district average or, as Williams put it, left "a negligible difference" between the two. In part, this was achieved through the Special Alfred Herbert Award: a bonus payment that was introduced to secure support among the chargehands and skilled workers for the restoration of the gang system. The deal must have caused some embarrassment among the shop stewards representing the skilled sections because, in April, the shop committee minuted the decision that, while "thanking" the company for the new wage structure, it would try to reduce the differentials by negotiating a 10% pay increase

for semi- and unskilled workers.¹²² No doubt, the senior stewards' failure to win such an increase contributed to Warr's demise as convenor the following year; it must also have fuelled a discontent which ignited into strike action after Doughty's election.

When the strikes came, Doughty was probably both unable and unwilling to emulate Warr's tactics. As a semi-skilled grinder and a new boy at Herbert's - he started work there in 1950 - Doughty lacked the authority ascribed to men such as Warr, who was both a long-service toolmaker and an experienced Labour councillor. Also unlike his predecessor, Doughty was not a "cadger". He was not prepared to try and fix some kind of quick, compromise deal. He held a principled approach to factory politics. Furthermore, he endorsed the strikers' objectives: he was concerned about the low pay suffered by the shop clerks, women workers and manual dayworkers; and he saw closed shop agreements as a vital objective in trying to build an effective workplace organisation.

The discontent felt by some of the skilled workers, as they went through the unprecedented experience of being laid-off through strikes - and, furthermore, strikes organised by people who occupied the lowest levels of the labour hierarchy - can be imagined. While it lasted, this mood must have sustained the tremendous pressure Doughty experienced in those first years of office.¹²³ However by 1964, after the 'revolt' of the dayworkers

had passed, Doughty quickly regained sufficient allies among the ASU stewards to harry Warr's attempt at a come-back. In January that year, the former convenor stood for the post of committee chairman. Eventually, he secured the post; yet only through the intervention of a district union official, and after this 'victory' he never won another election. Later, Warr retired from union politics when he took a foreman's job.¹⁴⁰

The managers' reaction to the new leadership, and the strikes that quickly followed, was also predictable. Their tentative efforts to accommodate the stewards were swiftly ended. In May 1962, immediately following the pinkers' strikes, the shop committee was informed that the noticeboards were not to be used for "Union Propagander".¹⁴¹ Then, in September, restrictions were imposed on the movement of the TGWU senior steward¹⁴² and in 1963 the managers decided to "tighten up custom and practice" on the movement of all the senior stewards.¹⁴³ Though linked explicitly to the disputes, the restrictions were still in force as late as January 1967 when the convenor was refused access to a visiting factory inspector.¹⁴⁴ For their part, the shop stewards decided (by 20 votes to 9) to quit the practice of making presentations to retiring managers.¹⁴⁵

In addition to tightening up on "custom and practice", it seems that the managers did the same on pay. When he compared the average income of skilled workers at Herbert's with the district rate, Williams observed that "a negligible differential in

earnings in December 1960" had "widened to 1/3 p.h. in April 1965" and that at "the present time (October 1967) this gap is 1/7 p.h.".*** For the latter years, the Labour government's pay laws provided a ready-made excuse for the widening gap: the managers had only to conform to regulations when the wage freeze was imposed in 1966. But there is no such excuse for the earlier period. It is evident that in response to Doughty's "straight" leadership - his disavowal of Warr's cosy, personalised and quasi-secretive way of conducting pay talks, and his explicit recognition of conflicts of class interests - and the surge of strike activity, the managers became more reluctant to concede increases on both piecework prices and the shop bonus. Despite the introduction of several new machine designs - chiefly, programme sequence control machines - which exposed, once again, the serious inadequacies of the rate-fixing department, Williams' data suggest that the managers were able to out-Herbert Herbert. Piecework earnings declined as a proportion of the skilled workers' total income: from 45% in 1960, they slipped to 40% in 1965 and 37% at the end of 1966. This was matched by a corresponding rise in the proportion of earnings accounted for by the Alfred Herbert Award: from 28% in 1960 to 35% six years later.***

In response to this situation, there is no doubt that a large number of skilled workers quit Herbert's and sought better pay elsewhere. According to Williams' figures, between 1964 and 1967 there was a net loss of 176 (15%) skilled, direct production

workers.¹⁴⁴ The turnover of labour must have been considerably more than this because, in 1966, the managers felt obliged to seek the shop stewards' co-operation to set up one month intensive courses for semi-skilled workers in the apprentice training centre. Warr's response to the proposal probably typified the attitudes of many of his colleagues:

"PRO(POSED BY) BRO WARR, WE REFUSE TO ALLOW THIS. AS IF GOOD WAGES WERE PAID THIS WOULD NOT BE NECESSARY."¹⁴⁵

Characteristically, the shop committee tried to exploit management's difficulties by pressing the demand that all trainees should be union members.¹⁴⁶ Equally characteristic, the managers were prepared to defer the scheme, while the issue went through the disputes procedure, rather than accept this condition.

Among the skilled pieceworkers who chose to remain at Herbert's, many were probably the "satisficers" Williams described in his study: men who valued job security, a regular income and a relatively low level of mental and manual effort, above the possibility of being among the top earners in the district. But there were also those who felt increasingly dissatisfied with the situation. The campaign by the fitters' stewards to secure a veto over job-prices, mentioned earlier in this section, reflected that dissatisfaction and anger at management's tough stance.

It appears that from about 1966 that anger grew among the "satisficers" as the plant managers de-stabilised the effort

bargain by introducing, in quick succession, a new range of radically different machine designs. That de-stabilisation was achieved in two ways. First, the rush of new jobs exposed the technical inadequacies of the rate-fixing department and the apparently arbitrary structure of piece-prices that had flourished under the gang system. (In his fieldwork, conducted during the autumn of that year, Williams found numerous examples of new job prices that were either far too high or too low in relation to the pay norms the chargehands were accustomed to.) Second, as Williams put it, the pieceworkers were "faced by the mental stimulus of new work, new methods and new approaches". In January 1967, Williams forecast that, in consequence, "the predictability of the environment will decline and with it perhaps the somnifacient (sic) atmosphere".¹²¹

Crisis, reform and the emergence of a new shopfloor elite

The new designs were part of a drive by corporate management, headed since 1964 by a professional manager who was not a Herbert veteran, to wipe out decades of conservatism and "re-model" the firm in accordance with the latest ideas in management theory. More will be said about this later. Here it will suffice to say that though part of this "re-modelling" included labour relations at Edgwick, this item was placed at the bottom of the agenda for change, perhaps because of the apparent "somnolence" of the workforce. If so, the managers soon had a rude awakening of their

own.

At the close of 1967, preliminary steps were taken to devise a productivity scheme; but short-time working held up this work until May 1968. When the talks were resumed, the managers seemed in no haste to conclude a deal. Then, in July, the crisis finally broke. Exasperated over management's delays, some 200 production fitters in the main shop struck work to press their demand for a daywork system and a pay increase that would raise their earnings to the district average. They stayed out for five weeks, sustained to some degree by a "Fighting Fund" hastily organised by the shop committee.

I believe that the sectional identity of the strikers could have been predicted, too. The production fitters were the largest section of skilled labour (where entrance was restricted to 'time-served' craftsmen) at Edgwick. In the minutes they appear to have been the most combative of the skilled workers. It was, for example, a long-running dispute over piece-work prices in the fitting shop which, in 1966, forced management to amend the gang system by granting workers the right to nominate a "price-fixer", a ganger who accompanied the chargehand in job-price negotiations with the rate-fixer. Indeed, it seems that by this time the fitters had displaced the toolmakers - now reduced to less than 50 men - as the dominant power in shop committee. And yet, none of these factors prevented a deterioration in their relative position as wage earners at the plant. William's figures show

that between 1964 and 1967, the production fitters slipped from third to fifth place in his six ranks of pay for skilled workers.¹²²

When they struck, in that summer of 1968, the fitters demonstrated one of the paradoxes of skilled labour in the engineering shops at Edgwick, namely, that despite their position in the labour hierarchy and the fact that shopfloor politics mirrored their interests, most skilled engineering workers were very poorly placed to press their demands through industrial action. The fitters' strike lasted five weeks; but it seemed to have little effect on production. During the dispute only 150 workers were laid-off, and another 30 suspended for taking sympathetic action; and when they returned to work, they did so on management's terms. They were promised substantial pay increases under a productivity scheme for which even the "road maps" were lacking;¹²³ and granted an interim pay award that left them still well behind the district average.

This paradox was central to the character of factory politics at Edgwick. Warr's "cadgerism", if I can call it that, was probably based on a pragmatic acceptance of that paradox; a recognition of the fact that, for the sections he represented, a strong workplace-based organisation was a doubtful prize to wrest from a management fiercely opposed to shopfloor bargaining when those same sections were so poorly placed, strategically, in the production process and when a reliance on the workings of the

labour market and the interventions of the union's district organisation secured a level of pay and conditions which kept his constituents reasonably happy. It was safer and economical of effort. Furthermore, the absence of a strong and assertive workplace organisation could actually benefit the skilled sections at the expense of the others. The practical demonstration of this point came during the trade recession in the late 1950s. A powerful factory-wide organisation, committed to the Confed's policy on redundancies, could have dissuaded management from revoking the agreement on short-time working. Instead, the shop committee did nothing to stop management from sacking hundreds of workers so that some skilled men could continue to boost their pay with overtime earnings.

Conclusions

The defeat of 'cadgerism', symbolised in Doughty's election in 1961, did not radically change shopfloor politics at Edgwick. As I said earlier, Doughty's repudiation of Warr's cosy, quasi-secretive style as a negotiator, his rejection of the 'old guard's' accommodation with management and his support for the 'revolt' of the dayworkers, brought an end to the old Herbert managers' limited variant of employer-sponsored corporatism; but much else remained the same. The foundry complex remained locked into its own politics. In the engineering shops, it was certainly

the case that Warr's defeat marked a turning point in the political influence of the toolroom - over the next few years, its power diminished to a size commensurate with the diminutive number of workers it contained - but those who were kept at the bottom of the hierarchy before Doughty's election, the women workers and the Asian dayworkers, were still there even after the strikes in 1962 and 1963 had astonished everyone, and probably themselves too, with their ability to wreak havoc on the shopfloor. That power could have radically re-shaped politics at the plant. If those strikers had not been isolated by the traditional practices and ideologies of their oppression; if the shop committee had linked their grievancies with, for example, the test bay workers' opposition to the merit system and the fitters' complaints about piecework prices, then the outcomes could have been very different. The struggle could have forged a powerful shopfloor organisation which management could not have continued to marginalise. Instead, the strikers remained isolated in their confrontation with managers who, being long-service Herbert employees themselves, resorted to the "hard gaffers" approach to labour relations in their moment of crisis. Consequently, as I have shown, once the strikers' anger was spent, Edgwick's "somnifacient atmosphere" was quickly restored and the shop committee forced to labour on in a political environment reminiscent of the late 1930s.

The focus of this chapter was firmly fixed on sectional workplace experience and the shop stewards' organisation, particularly

changes in its leadership, as it discussed some of the challenges to the 'somnolent' character of workplace politics at Edgwick. The next chapter will re-examine that narrative by looking in more detail at managerial reforms during that same period.

Chapter Six: Endnotes and References.

1. Arthur Astrop, Midlands Editor of *Machinery and Production Engineering*, interviewed in 1979 during the preparation of the Coventry Workshop report, *Crisis in Engineering*.
2. Roger Williams, "Payments By Results, Case Study No. 6", paper commissioned by the National Board for Prices and Incomes, January 1969, p. 28.
3. See Seymour Melman, "Report on the European Machine Tool Industry", EPA Project No. 420, unpublished paper commissioned by the European Productivity Agency in 1959; also, Board of Trade, "The Machine Tool Industry: A Report to Consider Professor Melman's Report to the European Productivity Agency", London: HMSO, 1960.
4. Industron Limited, "Multi-Client Production Lathe Survey - Report B: The United Kingdom Market for Capstan and Turret Lathes", an unpublished report by Industron Limited of Birmingham, management consultants, September 1963, Appendix III.
5. See chapter 3.
6. David W. Thoms and Tom Donnelly, "Coventry's Industrial Economy, 1880-1980", in *Life and Labour in a Twentieth Century City: The Experience of Coventry*, (eds.) Bill Lancaster and Tony Mason, (Coventry: Cryfield Press, n.d.) ch. 1.

7. John McGrath Davies, "A Twentieth Century Paternalist: Alfred Herbert and the Skilled Coventry Workman", in *Life and Labour*, (eds.) Lancaster and Mason p. 107.
8. *Ibid.*, p. 106.
9. Alfred Herbert Limited, minutes of the Directors' meeting on 11 January 1950.
10. *Ibid.*, 24 May 1950.
11. *Ibid.*, 11 February 1953.
12. *Ibid.*, 4 October 1950.
13. Herbert JS8C, minute of the meeting held on 6 July 1950.
14. *Ibid.*, 26 October 1950.
15. *Ibid.*, 21 August 1957.
16. *Ibid.*, 20 August 1958.
17. *Ibid.*, 24 February 1960.
18. See ch. 5.
19. Williams, "Case Study No. 6", see especially graph 2.
20. *Ibid.*
21. Phil Barnes, interview held on 10 June 1982.
22. Viv Brown, interviewed on 7 July 1982.
23. The phrase is taken from Tony Lane, *The Union Makes Us Strong* (London: Arrow Books, 1974).
24. Herbert JS8C, minute of meeting held on 12 May 1959.
25. *Ibid.*, 26 August and 7 October 1954.
26. *Ibid.*, 21 August 1957.
27. *Ibid.*, 3 November 1955. See also the minutes dated 27 May 1954 and 27 January 1955.
28. *Ibid.*, 28 March 1957, 25 April 1957 and 27 February 1958.

29. Ibid., 16 July 1958.
30. Ibid., 15 July 1959.
31. Ibid., 9 February 1961.
32. Ibid., 27 November 1953.
33. Ibid., 28 January 1956. At the same meeting two section stewards were asked to resign for working during the one-day strike.
34. See Davies' "Twentieth Century Paternalist" and Stephen Tolliday's "High Tide and After: Coventry's Engineering Workers and Shopfloor Bargaining, 1945-80" in *Life and Labour* (eds.) Lancaster and Mason.
35. Barry Doleman, formerly a patternmaker at Herbert's, interviewed on 26 July 1982.
36. Ibid.
37. Ibid.
38. Ibid.
39. A guesstimate based on Williams' study and figures in the Directors' minutes.
40. Malcolm Rimmer, *Race and Industrial Conflict* (London: Heinemann Educational Books, 1972), p. 34.
41. Ibid.
42. Barry Doleman, interview; and Howard Anderson, a former foundry clerk at Herbert's, interviewed on 15 March 1981.
43. Williams, "Case Study No. 6", p. 5.
44. Rimmer, *Race*, p. 10.
45. Ibid.
46. Ibid., p. 16.

47. Ibid., p. 18.
48. Zha Butt, formerly a store-room worker at Herbert's, interviewed on 14 July 1981; and Howard Anderson, interview.
49. Rimmer, *Race*, p. 37.
50. Ibid., p. 34.
51. Dennis Brooks and Karamjit Singh, "Pivots and Presents: Asian Brokers in British Foundries" in *Ethnicity at Work*, (ed.) S. Wallman, (London: Macmillan, 1979). See also Mark Duffield, "Rationalisation and the Politics of Segregation: Indian Workers in Britain's Foundry Industry, 1945-62" in *Race and Labour in Twentieth Century Britain*, (ed.) Kenneth Lunn, (London: Frank Cass, 1985).
52. Howard Anderson, interview; Neil Rider, formerly a foundry clerk at Herbert's, interviewed during fieldwork at Edgwick.
53. See ch. 2.
54. See chs. 3 and 4.
55. Tolliday, "High Tide", p. 208.
56. Herbert JSSC, minutes of meeting held on 21 February 1946.
57. Alfred Herbert Limited, minute of Directors' meeting on 26 June 1952.
58. For example, a minute of the JSSC meeting on 28 April 1955 contains a reference to a claim for lockers for the women in the capstan section.
59. In "High Tide", Tolliday claims women were 8% of Herbert's manual workforce in 1967 - significantly, the highest

percentage among the engineering firms in his four case studies.

60. See the photographs in Herbert's annual report for 1965; also Herbert JSSC, minute of meeting held on 23 January 1969.
61. Josie Castle, "Factory Work for Women: Courtaulds and GEC Between the Wars", in *Life and Labour*, (eds.) Lancaster and Mason, ch. 5.
62. Herbert JSSC Secretary's log, minute dated 17 October 1969.
63. Williams, "Case Study No. 6", p. 20.
64. In a growing literature on this subject, see, for example, Anna Pollert, *Girls, Wives and Factory Lives* (London: Macmillan, 1981).
65. Richard Croucher, *Engineers at War, 1939-1945* (London: Merlin Press, 1982), chs. 4 and 6.
66. Alfred Herbert Limited, minute of Directors' meeting on 11 June 1947.
67. Herbert JSSC, minute of meeting held on 23 March 1961.
68. Williams, "Case Study No. 6", p. 6.
69. *Ibid.*, p. 5.
70. Ernie Digger, interview on 4 March 1982.
71. Tolliday, "High Tide", p. 207.
72. Herbert JSSC, minute of meeting held on 26 July 1961.
73. *Ibid.*, 30 August 1961.
74. "'Colour Bar by Unions at Herbert Works' - Indians' Assoc.", *Coventry Evening Telegraph*, 20 October 1961; "Indian Workers' Leader Hits Out at ARU Stewards", *Coventry*

Evening Telegraph, 21 October 1961.

75. Alfred Herbert Limited, minute of Directors' meetings held on 16 December 1953, 23 June and 16 September 1954.
76. Herbert JSSC, minute of meeting held on 31 August 1950.
77. In 1953 Sid Birch worked "in the pen" for his first three months at Edgwick. Ten years later, another craft apprentice, Martin Smith, spent his first year "behind the wire". See interviews with Birch on 19 July 1982 and with Smith on 20 May 1981.
78. Martin Smith, interview.
79. Alfred Herbert Limited, minute of Directors' meeting held on 1 July 1955; also, Herbert JSSC, minute of meeting on 24 November 1960.
80. Herbert JSSC Secretary's log, minute dated 24 November 1968, indicates there were 157 junior males on piecework and 71 on daywork.
81. Williams, "Case Study No. 6", p. 5.
82. Ibid.
83. Davies, "Twentieth Century Paternalist", p. 116.
84. Ibid., p. 117.
85. Williams, "Case Study No. 6", pp. 4-5.
86. Alfred Herbert Limited, minute of Directors' meeting on 26 June 1952.
87. Robert H. Fryer, interview.
88. Williams, "Case Study No. 6", p. 3 and Appendix 1, p. 7.
89. Tolliday, "High Tide", pp. 234-7.
90. Herbert JSSC Secretary's log, minute dated 1 February 1969.

91. Ibid., 24 December 1968.
92. Tolliday, "High Tide", p. 224.
93. Phillip Banks-Price, interviewed on 8 June 1982.
94. Williams, "Case Study No. 6", p. 16.
95. See ch. 4.
96. Tolliday, "High Tide", p. 226.
97. Williams, "Case Study No. 6", p.1.
98. Ibid., pp. 30-31.
99. Herbert JSSC, minute of meeting on 27 March 1956.
100. Ibid., 31 October 1957.
101. "Herbert's Men Want Talks on Jobs", *Coventry Evening Telegraph*, 8 January 1958.
102. Herbert JSSC, minute of meeting held on 31 October 1957.
103. Ibid., 28 March 1957.
104. Ibid., 26 November 1957.
105. Alfred Herbert Limited, minute of Directors' meeting on 18 February 1959.
106. Herbert JSSC, minute of meeting held on 14 May 1958.
107. Ibid., 18 June 1958.
108. Ibid., 14 May 1958.
109. "Redundancy Assurances by Herberts - Talks 'Useful' Say Unions", *Coventry Evening Telegraph*, 9 January 1958.
110. Herbert JSSC, minutes of meetings held on 20 August 1958 and 12 May 1959.
111. Ibid., 20 August 1958.
112. Ibid., 16 April 1958.
113. Alfred Herbert Limited, minute of Directors' meeting on 2

December 1958.

114. Ibid., 18 February 1959.
115. Ibid.
116. Herbert JSSC, minute of meeting held on 17 March 1959.
117. Ibid., 22 April 1960.
118. Williams, "Case Study No. 6", p. 10.
119. Ron Doughty, interviewed during fieldwork.
120. Herbert JSSC, minute of meeting held on 29 September 1960.
121. Ibid., 9 February 1961.
122. Ron Doughty, interview.
123. Herbert JSSC Secretary's log, minutes dated 12, 16, and 18 April 1962.
124. Ibid., 21 May 1962.
125. "140 Herbert Clerks Go On Strike", *Coventry Evening Telegraph*, 27 September 1962.
126. "More Herbert Men Laid Off", *Coventry Evening Telegraph*, 24 October 1962; "Herbert Strikers Go Back", *Coventry Evening Telegraph*, 5 November 1962.
127. "Striking Clerks at Standard Vote to Return", *Coventry Evening Telegraph*, 3 October 1963; "3rd Walk Out This Week at Alfred Herbert", *Coventry Evening Telegraph*, 4 October 1963.
128. "More Men Out at Herberts", *Coventry Evening Telegraph*, 6 December 1963.
129. Herbert JSSC Secretary's log, minute dated 30 April 1963.
130. Ibid., 19 April 1962.
131. Ibid., 29 May 1963.

132. Ibid., 22 October 1963.
133. Ibid., 15 January 1963.
134. Herbert JSSC, minute of meeting held on 31 August 1966.
135. Ibid., 24 November 1965.
136. Ibid., 26 January 1966.
137. Ibid., 27 January 1960.
138. Ibid., 27 April 1960.
139. Ron Doughty, interview.
140. Herbert JSSC Secretary's log, minutes dated 13, 29, 30 January, and 10 February 1964.
141. Ibid., 16 May 1962.
142. Ibid., 28 September 1962.
143. Ibid., 2 January 1964.
144. Herbert JSSC, minute of meeting held on 11 January 1967.
145. Herbert JSSC Secretary's log, minute dated 27 April 1966.
146. Williams, "Case Study No. 6", p. 31.
147. Ibid., graph 2.
148. Ibid., pp. 4-5.
149. Herbert JSSC, minute of meeting held on 16 February 1966.
150. Ibid., 27 April 1967.
151. Williams, "Case Study No. 6", p. 29.
152. Ibid., pp. 4-5.
153. Herbert JSSC, minute of meeting held on 28 August 1968.

CHAPTER SEVEN: HERBERT'S RE-MODELLED: MANAGEMENT REFORM AND THE
RUSH TO INNOVATE.

Introduction:

When academics from IMEDE, the international business school at Lausanne, Switzerland, visited Herbert in 1962, management seemed more than satisfied with the company's performance and confident of its future prosperity. Typical of the statements made to IMEDE is this comment from Victor Brallsford, the then commercial director:

*"To maintain our current prominence in the industry, we have strong research, design and manufacturing groups and a powerful marketing organisation. With the start we've got, I don't think there's any doubt that 25 years from now we'll still be relatively strong as we are today."*²

This statement reflected a genuine pride in the company's "current prominence"; but it also put a brave face on the problems that threatened its very survival. The previous chapter touched on some of those problems when it discussed challenges 'from below' to the character of workplace politics at Edgwick.

This chapter will demonstrate management's consciousness of the need for reform and discuss how policies changed in response -

changes which subsequently led to a major challenge to workplace politics 'from above'. My account for this period falls into two sections. The first begins immediately after the death of the Sole and Governing Director, when the incumbent managers made a generally cautious approach to reform. This leads into the second period when, during a brief span of four years, an "outsider" tried to "re-model" Herbert's. In all this time - 1957 to 1968 - labour management seemed a peripheral issue and was subjected to only partial changes. Yet major reforms had only been postponed and, as I hope to explain, the strange progress of those later changes can only be understood within the context of the wider managerial crisis that Herbert's slid into as the unintended consequences of reform combined with an unexpected trade recession.

Reform Under the 'Old' Herbert Managers

At the beginning of the 1960s the parent company had four factories - at Lutterworth and Exhall on Coventry's perimeter, and at Red Lane and Edgwick inside the city - and one plant at Letchworth which had belonged to Herbert's only subsidiary, Sigma Instruments Ltd, since 1951," and produced inspection and measuring equipment. The total workforce was probably no more than 5000 employees, with the majority (possibly 3000) located at Edgwick."

Despite the fact that Herbert's produced a wide range of machine tools and tooling accessories, and also received a considerable income by factoring the products of other machine tool companies, the firm could justifiably claim be a specialist lathe manufacturer.⁴ Very little original design work was done on other types of machines - Instead management chose to remain dependent on licensing agreements - and the company's largest plant, Edgwick, was geared to the batch production of capstan and turret lathes (CTLs). Though reliable figures were unavailable, it seems likely that during the 1950s an average of 2000 CTLs were built each year at Edgwick.⁵ Consequently, senior management must have been particularly disturbed to record a steady decline in Herbert's share of the domestic market for CTLs during those years.

At first, there was only a relative decline as overall demand expanded rapidly; but from the mid-1950s the decline was absolute in a stagnating domestic market.⁶ The revival of machine tool production in Western Europe made Herbert's lathes increasingly uncompetitive in international markets.⁷ Furthermore, towards the end of the decade, there was a growing concern within the company that the volume production of standard machine tools in the Soviet Union would be switched to export markets now that its own economy had gained self-sufficiency in a wide range of machine tools.⁸ Added to these immediate concerns, members of senior management were clearly anxious about the likely fate of Herbert's if they continued to ignore current innovations in the

technology of metal-cutting. For example, in 1954, one director, Schofield, asked the Board to bear in mind "the fact that Warner & Swasey had designed a completely new range of capstan and turret lathes with double the horsepower to cater for the expected development of better carbides".¹⁰ And less than a year later, when Schofield complained that "our chucking automatics are in no way comparable with (those produced by) Gridley, New Britain, Montforts, etc" the minute reads:

"In the discussion which followed various members of the Board stressed the need for looking to the future and not waiting until we are short of business before we get on with new designs; the need for more emphasis on development was very real."¹¹

The material conditions that fostered Herbert's technological conservatism in the early 1950s - a massive defence programme,¹² the near destruction of the European industry and the fact that in both America and Russia producers were stretched to respond to domestic demand - had created an 'Indian summer' for many British firms; but the onset of the recession from 1957 signalled the approach of a less hospitable economic climate.

Shortly after Sir Alfred's death in 1957, the directors began to respond to these cumulative pressures. Towards the end of the decade there were some signs of increasing expenditure - albeit from a very low base - on research and development. In 1959, for example, a "special shop" was attached to the design department

at Edgwick.¹² Two years later, this was expanded into an "Applied Research Department" which was housed in a new building of its own.¹³ By this time, the fruits of these efforts had begun to appear. The available evidence indicates that by 1961 Herbert's had developed plugboard controls, or "static switching" as they called it, and fitted them to their smaller lathes.¹⁴ In the following year, the company launched a De Vlieg jigmill with a Herbert-designed NC control system,¹⁵ and in 1963, "co-ordinated tape control systems" - another Herbert variant of NC - were fitted to Herbert drilling machines.¹⁶ It is also likely that, at about this time, design work was commenced on a new range of plugboard lathes.

Those early years in the 1960s also witnessed some efforts to renew capital equipment at Edgwick. For example, in 1961, an electrical foundry - later known as the "white iron foundry" - was commissioned; and the "Light Engineering Department" was built on the same site to accommodate management's plans for the "flow-line" production of tools and accessories.¹⁷

Similarly, little time elapsed after Sir Alfred's death before the directors began to use some of the company's reserves to finance a series of acquisitions. Holbrook Machine Tool Co., a precision lathe manufacturer based at Harlow, Essex and Stratford, London, was purchased in December, 1958. Then, in 1960, I.L.Berridge - a sub-contractor for Herbert's smaller machines and based at Sanvey Gate, Leicester and Wigston - was

acquired. A year later two more subsidiaries joined the Group: Hudies' Electrical Co., a small component manufacturer based at Birmingham; and Wm. Whiteley of Huddersfield which built planers and textile machinery. One measure of the scale of this expansion is provided by the number of the Group's employees: in 1958 there were probably some 4000 employees; by 1961 there were 7350 "operatives" at the Group's nine factories.¹⁸

Though not inconsiderable in themselves, all these efforts to respond to market pressures were cautious and unimaginative when compared to management's approach to the reform of office administration. In 1962, the company purchased an IBM 1401 to deal chiefly with its wages and accounts. Costing approximately £8000, the computer had a random access memory (RAM) capacity of 4K - a diminutive figure compared to the power of home computers available just 20 years later, but at that time only two other IBM machines in Britain were as large: one was located at the Harwell Atomic Energy Centre, and the other at Lloyds Central Policy Office in London.¹⁹ Doug Howell, a senior member of the computer staff at that time, recalled how senior management took the decision to take the lead for British Industry. The machine, he claimed, was bought on the strength of a few wall diagrams, a film show, and some effective sales patter. He remembered that at one point in the meeting with the IBM representative, the salesman threw out a huge tail of computer print-out and triumphantly announced that all of it - some 30 feet in length - had been churned out by the printer in so many minutes. The

directors were so impressed that this demonstration clinched the deal, despite the fact that it meant violating a principle adopted after being caught out on the previous purchase of a Powers PCC, namely: "Don't buy if you can't see it for yourself".²⁰ If any problems were encountered with this computer, it did not discourage management from spending over £10,000 on a larger machine, an IBM 1400 with 8K RAM and discs, in 1964; by which time, Herberts employed some 42 computer staff.²¹

In addition to all these initiatives, in May 1958 the Board capitalised £5.5m of its reserves which represented roughly one sixth of Herbert's total assets. This move was probably motivated by the directors' worries about a takeover by any of several conglomerates, though both publicly and privately the directors also expressed some worry about the Labour Party's debate on the nationalisation of the machine tool industry. For example, in January 1958, Gimson reported on the Finance Committee's deliberations on *"hiving off parts of the business to protect the Co as far as possible against the effect of nationalisation."* It had concluded there was *"no defence"* against *"Mr Gaitskill's scheme to acquire shares in various industries"* (then mooted in the Labour Party as an alternative to total public ownership).²² The managers' concern seemed credible at that time because both the company and the industry were in the depths of the worst recession since the war and felt particularly insecure; but they may have exaggerated the dangers for reasons of self-interest, as the following minute suggests:

"Mahler said that the threat of nationalisation was real and... urged the Board to give early consideration to the establishment of an adequate pension scheme for directors and senior staff.""

The Entry of the Professional Managers

At the beginning of 1965, Richard Young, formerly Chairman of Raleigh Industries and a managing director of Tube Investments, was appointed as an executive director and Deputy Chairman. The following year he became Chairman of the Board.

It is claimed that his appointment was largely on the insistence of Sir Halford Reddish," Herbert's only non-executive director. If so, presumably it was with the support of the Herbert family since they were the major shareholders at that time and Sir Halford had been a close friend and business associate of the company's founder.

There is no doubt that Young was a radical choice as the third Chairman to follow Sir Alfred. Young's predecessor, Colonel Clark, was an ex-Herbert apprentice and a man who, with over 50 years service to the company, personified the "Herbert Spirit". By contrast, Young was an "outsider" both to the company and the industry. Apparently, his chief recommendation was his

"background in industrial administration at the highest levels".²² However, I would suggest that, given the Board's earlier response to market pressures - its attempts to up-date product designs and capital equipment, and its remarkable efforts to modernise office administration - it is likely that most of the directors welcomed Young's appointment. What they all failed to anticipate was the breadth and pace of change Young himself envisaged. Within four years - 1965 to 1968 - the new Chairman strove to "re-model" Herbert's.²³ From company livery to corporate structure, from logos to product lines, nothing was either too small or too large to escape the sweep of change.

At a very early stage, Young had decided that industrial relations at Herbert's, especially at its largest plant, Edgwick, also needed "re-modelling"; but he postponed reforms for nearly four years. This delay is significant in itself as it suggests that he saw the firm's labour problems as peripheral to Herbert's difficulties, or rather, a product of them: Young's primary target for change was management and not labour. His early initiatives included: the rapid growth of Herbert's through takeover and joint-venture; the rush to develop new machines; the continued expansion of the company's computer facilities; and the re-organisation of senior and middle levels of management.

Within the first year of Young's appointment, negotiations were finalised on both the acquisition of the machine tool division of Birmingham Small Arms Ltd (BSA) and a joint-venture with

Ingersoll Milling Machine Co. (Ingersoll). In total, the BSA acquisitions represented an enormous expansion of productive capacity. Seven plants, occupying a total of one million square feet of factory space and employing some 4000 workers, were added to virtually double the size of the Herbert Group.²⁷ It was, however, the sort of expansion that seemed justified at that time.

During the mid-1960s, British machine tool builders were enjoying a record-level of orders.²⁸ Furthermore, despite the fact that the overall trend could only be described as one of a *"gently rising volume of orders"*,²⁹ the Government's National Plan encouraged a sense of optimism. To match the demand for both domestic orders and exports, the Plan advised UK manufacturing industry to increase capital expenditure at an average rate of 7% each year in real terms over the period 1964-70.³⁰ In 1966, the Bullock Committee - a working party of industrialists and senior civil servants drawn together by the Ministry of Technology (Mintech) to review the problems arising from the cyclical pattern of machine tool orders - also judged an expansion of capacity to be *"desirable to improve the industry's ability to compete with imports at the peak of the cycle"* and *"a necessary pre-condition of further penetration into export markets"*.³¹ One member of that working party was 'Cliff' Harrison, then Herbert's Joint Managing Director. The merger with BSA was also implicitly encouraged by the same committee's appeal for a *"concentration of the industry into stronger units"*,³² as well as by similar

recommendations contained in the Economic Development Council's "action programme"²³ and in the Mitchell Report.²⁴

Besides these exhortations from the state, the merger was encouraged by the action of rival firms. For example, in 1966 Tube Investments used the compensation obtained from the nationalisation of its steel interests to purchase the Charles Churchill Group of machine tool companies.²⁵ Also that year, Herbert's was compelled to end its long-standing agency agreements with both James Archdale & Co. and George Richards & Co. as a result of their takeover by Staveley Industries.²⁶ Between 1964 and 1966, this conglomerate increased its holdings in the machine tool industry from four to 18 separate companies.²⁷ It is worth noting, also, that during the mid-1960s the American machine tool industry moved rapidly towards increased concentration of capital ownership.²⁸

Herbert's merger with the BSA companies afforded much more than an enlarged capacity and a wider product range. It also offered, on the cheap, an advanced design in turning machines. The Bastchmatic 50, exhibited at the Olympia Show in 1968, was a NC lathe developed by engineers at Mackadown Lane, Birmingham. This machine represented a new concept of the batch-type production lathe - one promoted by the National Research Development Corporation (NRDC) in late 1964.²⁹ There is some argument over the claim that it was the world's first NC lathe.³⁰ Nonetheless, it was a technically advanced design which, as a result of

careful market research,⁴¹ remained a commercially viable product for a decade.⁴²

The joint-venture with Ingersoll was also intended to combine an expansion of productive capacity with a move towards high technology, and to judge from the annual reports, Young's enthusiasm for the deal was unqualified. In April 1968, he wrote:

*"No part of our activities holds greater promise for the future than this joint enterprise with our partners, the Ingersoll Milling Machine Company of Rockford. We believe that we can together develop profitably the clear trend of demand and of technique for flexible high and low volume special purchase machinery and workhandling systems."*⁴³

Herbert-Ingersoll, the product of this joint-venture, was in his opinion, "much more than a manufacturing organisation". He continued:

*"It specialises in the study and analysis of whatever metalworking methods will yield to each user the highest profitability. Its team of experts in engineering and other relevant disciplines, is now capable of co-ordinated work with other sectors of industry to offer advance on a broad front of versatile, tailor-made and automatically controlled machinery and workhandling systems."*⁴⁴

The Herbert-Ingersoll plant was built on a greenfield site at Daventry to a design of its American parent and the consultant engineers, W.S. Atkins and Partners, which was in advance of any

comparable plant in Europe."² It used the largest automated equipment and handling devices, mainly to make specialised transfer line machinery for the motor industry. Here, too, Young's vision reflected the same consensus within industry and the state that encouraged the merger with BSA. As well as the familiar exhortations to respond to the projected demand for advanced designs, there was now direct financial inducement as a result of the introduction of investment grants in January 1966.

In 1967, senior management began to rationalise its rambling 'empire'. In September, the rump of Wm. Whiteley & Sons - which had already ceased to build textile machinery - was closed down. Next month, a similar fate befell Mudies' Electrical Co. and the remaining electrical and control gear subsidiaries amalgamated under Herbert-BSA Electrics."³ Production of tools and equipment in plants at Rotherham, Coventry, Redditch and Birmingham was rationalised with production at a "new factory at Falmouth".⁴ But in the following year, there were further expansions to the Group's capacity. An extension factory for the Churchill subsidiary was opened on a development site at Runcorn, and the Ardoloy subsidiary of GEC-AEI at Rugby was acquired that year to become part of "an integrated tungsten-carbide operation for cutting tools" which was intended to supplement production at the Rotherham plant."⁵

Soon after taking up his appointment, Young must have noted the Group's minimal expenditure on research and development,"⁶ and

that this kind of 'economy' was stretching out product development time to five years.²⁰ However, instead of committing substantially more resources to this area, it appears that he decided to take advantage of another form of government aid that became available at that moment.

In June 1965, the Minister for Technology, Frank Cousins, announced details of the Pre-Production Order Scheme. This provided for the purchase by the Mintech of the proto-types and pre-production models of original and advanced machine tools and equipment which were then placed in industry. The purpose of this arrangement was to foster the design of NC machines and their wider application in manufacturing industry. The scheme was based on a provision of the Science and Technology Act 1965, and became effective towards the end of that year when the first applications were received for the original firm allocation. Less than a year later, Cousins announced another scheme which had a similar purpose. Under the provisions of the Development of Inventions Act 1965, the National Research Development Corporation, through Mintech, was allowed to dispense firm to induce firms to place orders for technically advanced machinery. Under this scheme, the user was able to purchase machinery on a trial basis. Both schemes were in line with the recommendations of the Mitchell Report, published in 1960, and the EDC's "action programme". However, while it seems that the "trial period" terms of the NRDC's scheme were unattractive to industrialists, the popularity of the Pre-Production Order Scheme persuaded the

Government to allocate a further £5m in April 1967.**

As I said, it seems likely that Young tried to use the Mintech scheme as a cheap and quick way of restoring Herbert's pre-eminence as a designer and builder of lathes, for while the Group's expenditure on research and development was kept below 2% of turnover - and this included WRDC support - the subsidy of £1.4m from Mintech enabled Herbert engineers to develop the proto-types of eight different machine designs in readiness for the Olympia Show in 1968. All of them were turning machines - lathes or machining centres - built at Edgwick.** One former Mintech official described some of those designs, such as the 2M and 3M (both plugboard machines), as traditional configurations attached to electronic control systems; but the same criticism could not be levelled against the V6 Automatic (a six-spindle vertical, numerically controlled chucking lathe) or the Machining Centre. On the contrary, it was the technical novelty and complexity of these designs which eventually led to their commercial failure;** a point to which I will return later.

In "re-modelling for the seventies", changes were not confined to the creation of a "new generation of machines". As might have been expected, the expansion of the Group's computer facilities was accelerated enormously. Hardware costs rose from £18,000 in 1964 to £805,000 in 1968; and within that period the number of staff was more than doubled to 93 employees. Two years later, running costs were estimated at £407,000.** All of this was not

intended solely to ease the burden of the wages and accounts departments. Amongst other things, there were plans to computerise activities such as invoicing and stock control (though it was not until 1970 that the stewards at Edgwick also learnt of senior management's intention to computerise the shop scheduling systems).

Young's determination to re-cast the management organisation was not put into effect until 1968, when it coincided with the urgent need to rationalise and "align" managerial staff following the recent acquisitions and closures. During that financial year, Group services were restructured into four separate divisions - management services, marketing, purchasing and finance - and from October 1968, Herbert's 23 operating companies were re-organised into seven. Each was planned to deal with a single range of machines or equipment. Each was given an executive board and managing director with "wide autonomy" on policies ranging from design and development to manufacture and selling.

Re-organisation on this scale entailed the recruitment of "some senior executives...from other industries"" who, in turn, recruited others into their management teams. Reliable figures on the numbers of new management personnel are unavailable; but anecdotal evidence" and the official statement that the "immediate added development expenses" of this exercise came to £300,000 suggests there was a considerable increase of staff. In addition to those "development expenses" it was recognised that the re-organisation of management would entail considerable costs

in terms of executives' time. Yet Young decided to press ahead with the last component in his 'package' of reforms: "a major revision of industrial relations".¹⁰

Initially, Young reported that all was going well:

"all levels co-operated with good understanding, for which special tribute is due to foremen and supervisors and to the union representatives, all of whom took part vigorously in special courses".¹¹

Next year, however, he had to admit to some "difficulties - including some interference of output by stoppages".¹² The next chapter will explore those "difficulties" in some detail. In the remaining section of this chapter I hope to show some of the links between management's problems in this area and the problems encountered in other areas of "Herbert re-modelled".

The acquisition of the BSA companies was an asset to the Group, but its purchase had been costly. In addition to issuing 3.2 million B ordinary shares at par, Herbert's spent £2.5m to provide working capital for the new subsidiary.¹³ Furthermore, the Churchill Machine Tool Co., itself acquired by BSA in 1961, quickly proved a liability for management.¹⁴

The Herbert-Ingersoll joint venture also proved expensive.

Besides subscribing 51% of the shares, Herbert's provided all of

the initial finance which amounted to £3.5m.** The press described the venture as doubly miscalculated. The high-cost approach to the plant layout meant that it had to work impossibly close to its nominal £6m a year capacity to make a profit - at its highest turnover of £3.3m in 1970, the plant lost just under £1m.** - but, at any event, the anticipated upturn in demand from the motor industry never came. Since Young had made this venture his personal project - even to the point of excluding the other Group directors from Herbert-Ingersoll's management by making it an "independent subsidiary"*** - its accumulating deficits must have been particularly embarrassing.

The Mintech's Pre-Production Scheme proved similarly disastrous for Herbert's. The officials who designed the scheme had assumed that machine tool companies - the larger ones, at least - carried out a certain amount of market research. Later they discovered their mistake. Only "a small percentage of manufacturers", Mintech officials reported,

*"carried out any serious scientific market research...the general practice being to collate information from the sales organisation, compare this with competitor's designs and then produce a new product and hope to sell it."****

Herbert's was not among that "small percentage" and none of the machines developed under the Mintech scheme became a major product line for Herbert's. Most failed to survive as marketable commodities into the 1970s. A few, such the V6 Automatic and the Machining Centre, even proved difficult to give away as

proto-types."

Another difficulty with the Mintech scheme was one of its intended virtues, namely: that machine tool builders were encouraged to exhibit their new designs in time for the 1968 Olympia Show. For the first applicants, this meant a three year interval; but, clearly, this was not enough for almost all the companies. By March, 1969, only one company had completed the operational trials and begun to sell its machine. It is possible to detect a sense of irritation in Mintech's observation on this question:

*"The time scale for these activities could be from three years if the manufacturer was faced with severe competition in one product, up to five years if events took their normal course."**

When this performance is compared to the aerospace industry, the Ministry's impatience was understandable. But, unlike the aircraft corporations, machine tool builders did not enjoy the kind of state patronage in which massive sums of public money were used to subsidise research and development through cost-plus contracts. It is also worth recalling that the early development of numerically controlled machine tools took place in America precisely because of a considerable state involvement there."

It can be argued that one of Herbert's chief mistake was in accepting Mintech's preferred pace, and exhibiting all the new designs at Olympia, despite the considerable developmental

problems the engineers had encountered; but it has to be said that management was also anxious to put its "new generation of machines" on display as quickly as possible. In the case of the V6 Automatic and the Machining Centre, this haste had no serious long term consequences since these designs did not advance beyond the proto-type stage. However, with those machines that were put into production runs - such as the 3M and the 3 Programauto - the effects were disastrous.

Stocks and work-in-progress accumulated as sales of the new designs did not reach the projected figures. Build programmes - already complicated by the introduction of production runs for six new machines - were frequently interrupted by design modifications as the engineers eliminated the numerous technical 'bugs'. Sid Birch recalled:

"...we were doing mod's on mod's on mod's. I think I've done mod' 91B. 91....! How far do you mod' a thing before you re-design it?"

Besides increasing the accumulation of work-in-progress, there was an erosion of 'goodwill' as the modifications delayed shipments to customers. Obviously, there was a further deterioration of 'goodwill' when customers found that more modifications were necessary after they had purchased the machines. These design changes became so frequent that management eventually encouraged some of the service engineers to form "modification teams" and perfect a routine in their work. Sid

Birch again:

"They gave me a bit of scope at Herbert's. They knew I were a trier. I had an electrician and a fitter - well, matter of fact, I had two fitters. I tried to get an apprentice because it would do him good...Then I had a third man who would help me with a car and a van...We'd go in, rip the turret slide straight off as a unit, bang it in the van and send him off with it...And while he'd got back there, I was modifying the whole machine...We had a one day turn-around on the turret slide unit...We got going in the end.We'd got a team, an ace team."

In addition to discovering organisational talents he had never imagined, Sid found the job provided other unexpected opportunities:

"The 3M - brilliant (concept)! But it kept (breaking down)...Oh, the 3M took me round the world twice. I've got a lot to thank the 3M for. But it used to break my heart, though, knowing the old Herbert's and the new..."

All these problems - the costs of scheduling production without reliable market intelligence and coping with frequent design modifications both in production runs and at the customer's works - would not have been so critical if they had been confined to one or two machines. But these problems were encountered with almost every Mintech-sponsored design - on top of the design problems encountered with the 2 Programauto, one of the few

plugboard lathes developed prior to the Mintech scheme.

As I said earlier, all these difficulties had to be dealt with in addition to the problems of simultaneously organising the production of six new machines. Dr. Austin, one of the designers of the Batchmatic and later a senior technical officer within the Herbert Group, believes this was too much for production management to handle:

"Herbert's was a big company, of course; but, even so, eight totally new machines - not slight modifications of existing products but totally new - is an awful lot to swallow in one go. And that was the problem. The manufacturing, production engineering capabilities just couldn't cope with that number of machines."

Here, Dr. Austin was referring to all the technical and organisational problems involved in the manufacture of thousands of bits and pieces and of their assembly into new designs. However, these were not the only difficulties that confronted production management for there were also problems linked to the politics of production. To put it in management's terms, it represented a considerable threat to the stability of the effort bargain.

In an earlier chapter, I cited Phil Banks-Price to describe this kind of stability during the 1950s and in 1967, Williams found the situation largely unchanged:

"...there have grown up strong norms concerning what is a reasonable level of earnings...Some chargehands will even take back a price which is too high and ask for a reduction...Many of (the shopfloor workers) have been at Herbert's for 20 or 30 years, working on the same jobs, secure in their employment and their earnings."²²

The unchanging character of the product mix at Edgwick, Williams argued, was one reason why management had been able to prevent internal wage drift in a situation that normally would have been "a shop steward's delight". He noted:

"The Ratefixing Department is poor, method study non-existent, training in work-study techniques non-existent and (there are) sufficient inequities and anachronisms to generate a multitude of 'invidious comparisons'.²³

Logically, then, an onrush of new designs would be expected to dispel this "sominifacient (sic) atmosphere". Shopfloor workers would be faced with the demands of new work, new methods and new approaches coupled with an uncertain level of earnings. For some this would be a threatening situation. For others it opened up a rare opportunity to re-negotiate the price of their labour power (as Tolliday observed in the case of the shadow factories in wartime Coventry).²⁴ Whatever their response, though, the consequences were likely to be the same: a new wage militancy based on a growing bargaining awareness among some sections of the shopfloor.

The re-organisation of management also entailed considerable costs - and not only those mentioned by Young himself, namely, the "immediate added development expenses" of £300,000 and the "loss of executive's time".⁷⁴ There were the financial costs of consultancy fees. The total bill was never publicly discussed; but one journalist suggested the largest single fee was in the region of £250,000.⁷⁵ There is no doubt that the re-organisation also had an adverse impact on morale within senior and middle levels of management. Some of the 'old Herbert' managers felt that the new executive appointees - "management consultants and not machine tool people", as Dr. Austin put it - devalued their skills and experience. The new managers, he observed,

"were no fools, but I think they ought to have spent some time listening to people at Herbert's who knew a lot of the problems, a lot of the history, and got years and years of machine tool experience there, and distilled from that new methods, new thinking. They should have tried to blend the two - which they didn't do."

For their part, the new executives must have resented the "outsider" tag and, given the timing of their entry, it is understandable why they blamed the veteran Herbert men for the company's difficulties.

In happier circumstances, it is probable that this situation would have resolved itself; but the crisis had become all too

apparent by the late-1960s and, as it deepened, those tensions inevitably increased. At the time, the initial signs of this factionalism seemed innocent enough: the resignation of Derek Allen (the company's only surviving link with the Herbert family) due to "ill-health" in 1967;⁷⁴ and the retirements of Hugo and Badnadge from the Board. Only years later did those divisions become public knowledge when a succession of crises brought the company to the brink of collapse.⁷⁵

The annual report for 1966/7 gave the first official indication to shareholders that the programme for "Herbert re-modelled" was going wrong. In his statement, Young felt obliged to justify the continued expenditure on managerial innovations "in spite of the present low level of earnings" and a continuing fall in sales. "Meantime," he declared, "we are sticking to our guns."⁷⁶

The following year, Young reminded the shareholders of the "logic" of "Herbert re-modelled":

"If there was a temptation, because of the prevailing trade circumstances, to defer this effort, which we knew would be costly in terms of money and executives' time, it was resisted in the conviction that remodelling for the seventies could not be left until the seventies began. All the logic of what we had done so far called for this immediate step."⁷⁷

The report for 1968/9 broadly carried the same message, though this time there was a recognition that the year had been

particularly "grim" for Herbert's because of the combined effect of trade recession and re-organisation. Nonetheless, the prescription seemed unchanged. For Young the crisis only confirmed "the urgency of the work in hand to restore essential profitability and to secure the company's full efficiency and share of markets."¹⁰

By that time, though, the malaise was self-evident even in the annual accounts. In 1961, the Group's general investments stood at £6m: by 1966 they had fallen to £1.6m. Bank overdrafts had increased from £325,000 in 1962 to £8.9m in 1968. Current liabilities had risen from £6.6m to £19m in the same period.¹¹ Also during those years, the accumulation of stock and work-in-progress as a proportion of capital employed had climbed from 36.7% to 67.6%.¹² In 1966, the profit rate reached an all-time high at 18.5%. The following year, it had slipped back to 11.8% - probably an unremarkable result given the rapid expansion of capital at that time. But in 1968, the profit rate fell to 5.6% which meant that on sales of £39.7m, Herbert's made a trade profit of only £1.9m (or £0.8m after the shareholders had taken their cut). From an inspection of the annual accounts of some of Herbert's competitors, the shareholders could have noted that in 1968 the "most successful" machine tool firms achieved a profit rate of 20% or more on turnover and more than double Herbert's profits per employee.¹³

Inevitably, the value of Herbert's shares - which had steadily

declined in the early 1960s - quickly deteriorated. Ordinary shares, which had reached their highest price in 1961 when they were valued at 80/3d each, had slipped to 68/1d by 1966; and by 1969, they had fallen to 51/9d.** However, by then the spending spree was over. Young continued "remodelling for the seventies" - major innovations in managerial policies in such areas as industrial relations and production control were still pursued - but now there was a firm check on finance. Probably as a result of pressure from the banks and insurance companies, who had been quietly replacing the Herbert family as the major shareholders, the immediate priority was to restore the company's liquidity - an objective Young found easier to achieve and relatively quickly.

Bank overdrafts were cut from £11.5m in 1969 to £7m a year later; current liabilities declined from £22.6m to £16.9m in the same time,** and if one's attention was confined to the indices of liquidity - such as the ratio of current assets to current liabilities (the working capital ratio) and the ratio of quick assets, debtor and cash to liabilities (the liquidity ratio) - it seemed Herbert's was beginning to perform very well compared to even the "most successful" companies.** Meanwhile, the value of plant and machinery (in current prices) declined from £6.5m in 1968 to £4.7m in 1970;** the Group's total workforce declined by 600 to 10,955 employees in the same time;** and expenditure on product development fell to less than 1% of sales (in fact, more was spent on renewing licensing agreements).**

From his earliest days at Herbert's, Young had decided that management's paternalistic labour policies were antiquated and inefficient. Though labour costs had been kept relatively low, the main plant had an ageing, supernumerary workforce and an apparently poor productivity record.⁵⁰ In 1967, Williams came to much the same conclusion. In particular, he argued that the gang piecework payment system had created a factory of "satisficers" rather than "maximisers":

"Because Herbert's do not lose their labour to other firms (despite a current £3 pw differential between its average earnings levels and those of the district) it is reasonable to hypothesise that the type of employee the firm attracts and retains is not motivated by the prospect of financial gain. If the effort bargain is consistent with this state of affairs, the firm is obtaining a correspondingly low return of effort."⁵¹

One of the consequences of the spate of product development in the mid-1960s was that it became apparent that reform could not be delayed very much longer. As I mentioned earlier, Williams argued that the stability of the effort bargain was already being undermined by the new jobs. The byzantine nature of the gang piecework system - which had served management so well in the past - was fast becoming a liability. Williams concluded his report with this warning for management:

"At the present time Alfred Herbert's is poised for a 'great

leap forward' in the modernity of its machine range, (and) it is likely that a substantial amount of 'control' will be lost as long established norms are overturned by the substantial changes this will entail.""

It seems reasonable to assume that Young also feared this loss of control, and that it was one factor which prompted him to implement his plans for a radical reform of Herbert's labour policies at that time. However, as I hope to show in the next chapter, those plans were soon disrupted and distorted by the combined effect of the trade recession and the new limitations on spending. Prompted by Herbert's corporate crisis, the labour reforms quickly became another of its victims.

Conclusion

This chapter has detailed how management, after the death of the company's founder, struggled to implement much-needed product and management reforms to reverse the trend of the firm's declining share of the product markets. Industrial relations was not regarded as a priority until the consequences of some of those reforms began to de-stabilise the effort bargain at the firm's largest plant and demonstrate how little control management had over production. This account of Herbert's developing crisis sets the scene for the next chapter which will look in detail at Young's efforts to drive through a comprehensive productivity

scheme - an initiative that represented a direct and major challenge 'from above' to the character of workplace politics at Edgwick.

Chapter Seven: Endnotes and References

1. Edmund P. Learned, Francis J. Aguilar, and Robert C.K. Valtz, *European Problems in General Management* (Homewood, Ill.: Richard D. Irwin, Inc. for IMEDE, 1963), p. 44.
2. Alfred Herbert Limited, minute of Directors' meeting held on 30 October 1951.
3. In February 1959, Clarke reported that the total workforce stood at 3,347; but this was immediately prior to an unspecified number of redundancies. See minute of Directors' meeting on 18 February 1959.
4. Learned et al, *European Problems*, p. 34.
5. Ray Stanton, technical sales manager, interviewed during fieldwork.
6. Industron Limited, "Multi-Client Production Lathe Survey - Report B: The United Kingdom Market for Capstan and Turret Lathes", reported prepared by Industron Limited, Birmingham, September 1973, Appendix III, graph 2/3.
7. Phillip Banks-Price, interview held on 8 June 1982.
8. Alfred Herbert Limited, Statement by the Chairman, 66th Annual General Meeting, 6 May 1959.
9. Alfred Herbert Limited, minute of Directors' meeting held on 16 September 1954.
10. Alfred Herbert Limited, minute of Directors' meeting held on

1 July 1955. This debate took place on other occasions both prior to Sir Alfred's death (see minutes dated 26 September 1956 and 26 April 1957) and immediately afterwards (minute dated 2 December 1958).

11. Alfred Herbert Limited, minutes of meetings held on 11 February and 26 June 1953.
12. Alfred Herbert Limited, Directors' Report and Statement of Accounts for the Year Ended 31 October 1960, p. 14.
13. Ibid., Report and Accounts, 1961, p. 12.
14. Ibid., p. 14.
15. Ibid., Report and Accounts, 1962, p. 10.
16. Ibid., Report and Accounts, 1963, p. 11.
17. Ibid., Report and Accounts, 1961, p. 13.
18. Ibid., p. 11.
19. Ray Hill, senior manager of Herbert's Computer Services Division, interviewed during fieldwork.
20. Doug Howell, interviewed during fieldwork.
21. Ray Hill, interview.
22. Alfred Herbert Limited, minute of Directors' meeting on 7 January 1958. See also the Chairman's Statements in the Annual Reports for 1957 and 1958.
23. Alfred Herbert Limited, minute of Directors' meeting on 5 November 1957.
24. *Sunday Times*, 3 November 1974.
25. Alfred Herbert Limited, Statement by the Chairman, 72nd Annual General Meeting, 7 May 1965, p. 6.
26. The phrase "Herbert re-modelled" is taken from Young's

- statement to shareholders in the Report and Accounts, 1968, p. 6.
27. Alfred Herbert Limited, Report and Accounts, 1966, p. 5.
 28. Ministry of Technology, "Report of the Working Party on the Problems Arising from the Cyclical Pattern of Machine Tool Orders", Chaired by R.H.W. Bullock, London: HMSO, 1966, pp. 5-6.
 29. Trade Union Studies Information Unit, *Machine Tool Report* (Newcastle: TUSIU, 1978), p. 13.
 30. Cmd. 3874, *Investment Incentives* (London: HMSO, 1966) (reprinted 1970), pp. 3-4.
 31. Ministry of Technology, "Cyclical Patterns", pp. 3, 23.
 32. *Ibid.*, pp. 3, 24.
 33. *Ibid.*
 34. TUSIU, *Machine Tool Report*, pp. 27-8.
 35. For an account of Tube Investment's acquisition and rationalisation of Charles Churchill Limited see: TUSIU, *Machine Tool Report*; and "Tube Investments", *Social Audit* Vol. 1, No. 6 (Winter 1973/74).
 36. Alfred Herbert Limited, Chairman's Statement at the Annual General Meeting, 29 April 1966, p. 5.
 37. Coventry Workshop, *Crisis in Engineering: Machine Tool Workers Fight for Jobs*, (Nottingham: Institute for Workers' Control, 1979), p. 19.
 38. London Graduate School of Business, "William Attlee Ltd.", Case Study BP21 A (Revised), mimeo, undated.
 39. Peat, Marwick, Mitchell & Co., "Alfred Herbert Limited",

Appendices to Draft Document for Discussion, dated 7 March 1975, p. 2/9.

40. A claim made by Ray Stanton and Derek Illingworth, interviewed during fieldwork; but a Mintech report described the Churchill-Redman P5 as the first NC lathe designed and developed in Britain (Ministry of Technology, "Pre-production Order Scheme [parts I and II]", prepared by MA2, Abell House, London, March 1969, p. 20). In "The Man Behind the Machine", *Metalworking Production*, 4 June 1969, p. 39, the Batchmatic 50 was described as "one of the forerunners of perhaps a new breed of machine tools".
41. Ron Austin, interviewed on 22 July 1982, claimed that his work was based on P.E.R.A.'s survey of turning requirements in the engineering industry. This is supported by commentary in "The Man Behind the Machine", *Metalworking Production*, p. 35.
42. Peat, Marwick, Mitchell & Co., "Alfred Herbert Limited", pp. 2/10, 2/12.
43. Alfred Herbert Limited, Report and Accounts, 1967, p. 4.
44. Ibid., p. 5.
45. "Alfred Herbert Wants to Unload a White Elephant", *Investors' Chronicle*, 4 March 1972.
46. Alfred Herbert Limited, Report and Accounts, 1967, p. 5.
47. Ibid.
48. Alfred Herbert Limited, Report and Accounts, 1968, p. 5.
49. Figures are unavailable for the early 1960s, but they were probably little higher in real terms than at the end of the

- decade. See ch. 2.
50. Learned et al, *European Problems*, p. 34.
 51. Ministry of Technology, "Pre-production Order Scheme (Parts I and II)", p. 1.
 52. Ibid., Fig. 3, p. 73.
 53. Don De Groot, interviewed on 5 July 1982.
 54. "Machine Tool Makers are Stripping for the Pray", *Engineer* 10 (February 1972), p. 46.
 55. Ray Hill, interview.
 56. Alfred Herbert Limited, Report and Accounts, 1968, p. 6.
 57. Phil Barnes, interview.
 58. Alfred Herbert Limited, Report and Accounts, 1969, p. 4.
 59. Ibid., Report and Accounts, 1968, p. 6.
 60. Ibid., Report and Accounts, 1969, p. 4.
 61. Ibid., Report and Accounts, 1966, p. 5.
 62. Ron Austin, interview.
 63. *Investors' Chronicle*, 4 March 1972.
 64. Ibid.
 65. Patrick O'Brien, interviewed on 16 September 1981; confirmed by an organisation chart obtained during fieldwork.
 66. Ministry of Technology, "Pre-production Order Scheme", p. 6.
 67. Roy McCall, interviewed on 21 October 1981.
 68. Ministry of Technology, "Pre-production Order Scheme", p. 6.
 69. David F. Noble, "Social Choice in Machine Design: The Case of Automatically Controlled Machine Tools", a paper presented at the National Convention of the Organisation of American Historians, April 1978, mimeo, p. 15.

70. Sid Birch, interview held on 19 July 1982.
71. Roger Williams, "Payments By Results Reference Case Study No. 6", paper commissioned by the National Board for Prices and Incomes, January 1969, p. 30.
72. Ibid.
73. Stephen Tolliday, "Government, Employers and Shopfloor Organisation in the British Motor Industry, 1939-69", Kings College Research Centre, Cambridge, September 1982, mimeo, pp. 3-5.
74. Alfred Herbert Limited, Report and Accounts, 1969, p. 3.
75. *Sunday Times*, 3 November 1974.
76. Alfred Herbert Limited, Report and Accounts, 1967, p. 6.
77. See Ken Norman's letter published in *Coventry Evening Telegraph* on 17 June 1981, and Patrick O'Brien's response published in the same newspaper on 2 July 1981.
78. Alfred Herbert Limited, Report and Accounts, 1967, p. 6.
79. Ibid., Report and Accounts, 1968, p. 6.
80. Ibid., Report and Accounts, 1969, p. 3.
81. Extel Cards.
82. Ibid.
83. Machine Tools Economic Development Council, *A Financial Study of British Machine Tool Companies*, a report by Peat, Marwick, Mitchell & Co., published by the National Economic Development Council, London, January 1974, pp. 24-5, 76-7.
84. Extel.
85. Ibid.
86. Machine Tools EDC, *A Financial Study*, pp. 46-7.

87. Extel.
88. Peat, Marwick, Mitchell & Co., "Alfred Herbert Limited", p. 2/8.
89. George V. Bloomfield, main board director in 1975, cited in the minutes of the Mackadown Lane Site Consultative Committee, held on 4 February 1975, pp. 3-4.
90. Richard Young, interviewed on 9 August 1982.
91. Williams, "Case Study No. 6", Appendix 1, p. 7.
92. Ibid., p. 31.

CHAPTER EIGHT: PRODUCTIVITY BARGAINING AND THE ONSET OF THE
CORPORATE CRISIS.

Introduction

In the previous chapter, I argued that Herbert's corporate crisis raised the urgency of the reform of labour management at the company's largest plant, Edgwick. The need to improve liquidity and deal with the de-stabilising effect of the new jobs on the plant's pay norms gave Young some powerful arguments for change.

In this chapter I intend to examine the character of the changes that took place, largely through a close examination of the stewards' minutes as they provide, for those years, an unusually rich contemporaneous record of events (and the only one available to me). Through that detailed review I hope to achieve three principal objectives. First, I intend to demonstrate the radical scope of Young's reforms; how, through the abolition of the gang system and the introduction of a productivity payment scheme, senior management sought both more direct control over the shopfloor and increased productivity through measured daywork and the computerisation of production control. My second objective is to detail how, as the very depth of Herbert's crisis persuaded senior management to find quicker and cheaper ways of implementing this strategy, those compromises effectively

undermined its aims, even though the main thrust of the reforms still succeeded in turning workplace politics inside out by drawing the stewards into a central position in a highly formalised and centralised bargaining system, and pushing the chargehands, formerly the "kingpins of management", out to the periphery of the firm's new regime and 'bureaucratising' them through the computer. The final aim of this chapter is to show the stewards' active response, first to the promise of the productivity scheme and its new employer-sponsored corporatism, and then to its distortion and eventual demise as Herbert's entered a decade of crises and redundancies. It thus provides a further case study of both the truth and the complexity of the claim that management policies shaped the terrain of workplace unionism. In doing so it also extends my account of the shifting and contradictory features of managerial strategies and the active character of union responses.

The chapter is structured by the chronology of events. The first section deals with the last days of the gang system at Herbert's: from July 1967, when the Labour Government introduced productivity criteria into pay bargaining, through to January 1969 when the senior stewards signed the productivity agreement. The second section discusses events during the first phase of the new pay scheme. The third section takes the narrative forward from October 1969 to April 1970 when the scheme went through its second, 'transitional' phase. The final section deals with a period which instead of witnessing the last phase of the

productivity scheme and the introduction of measured daywork, saw the collapse of the pay scheme as the company entered a decade of decline.

'Road Maps' to the End of a Gang System

For one year from July 1967 the Government's pay policy dictated that all pay increases had to be based on low pay or productivity criteria.³ Yet it was not until December 1967, when the senior stewards at Edgwick were notified that the newly-created Management Services Division would soon begin "activity sampling" on the shopfloor, that management took the first tentative steps towards the implementation of a comprehensive productivity scheme. The record suggests the shop stewards were told little if anything about the purpose of "activity sampling". They were certainly not informed that it was a preliminary to detailed work studies and the eventual implementation of a long deliberated scheme. However, after taking this first step, management stalled for five months as the "unusually long recession" in the machine tool trade took its effect on production. Of course, from one viewpoint it made little sense to begin work studies while more than half the shopfloor was on short-time - as was the case by March 1968 - but while the directors waited for better times, other circumstances changed for the worse.

The last time there had been a plant-wide pay increase was in May 1967 - and that was a payment deferred from October 1966 by the Government's pay policy.² This had the effect of widening the gap between the district average and pay at Edgwick. In October 1967, the difference was 1/7d per hour, that is, more than £3 per week.⁴ By May 1968, the fitters claimed their pay was 2/1 d per hour less than the district average.⁵ On top of this grievance, most production workers must have experienced sharp fluctuations in pay during the period of short-time working in the early months of 1968. Probably few direct workers were put on short-time for very long, but many would have experienced cuts in overtime which, as I mentioned earlier, was regarded as the "money spinner". Predictably, as the numbers on short-time began to decline, these grievances came to the surface in a series of sectional wage claims. In May, the fitters submitted a claim for a day-rate equivalent to the district average. Sectional pay claims from the patternshop, the pre-production department and internal transport quickly followed, but management appeared unconcerned. No formal response was made to these sectional demands. Instead, plant-level management waited until 10 July to present the senior stewards with the first outline of a factory-wide productivity deal.

The details in the stewards' notes are unclear, but it seems the managers initially offered nothing more sophisticated than a 4% pay increase in exchange for an agreement on 'flexibility' and 'mobility' of labour.⁶ This suggests that, even at this late

stage, senior management was prepared to further delay major reforms in industrial relations and make do with a more conventional productivity scheme such as those agreed with two minor sections of the workforce only a month later. Given the circumstances, the offer was perceived as an insult. It was immediately rejected by the senior stewards, and the fitters decided to press their own claim by taking strike action.' On the following day, the JBSC endorsed the senior stewards' position and agreed that the fitters' claim had to be settled before talks could be resumed on any plant-wide productivity deal. The committee also decided to levy the membership for the strikers' "Fighting Fund".

The fitters stayed out for five weeks. It was an extra-ordinary act of wage militancy and group solidarity for a section of skilled Herbert employees, and it demonstrated the pre-eminence of the fitters in Edgwick's shopfloor politics. Paradoxically, the strike also highlighted their strategic weakness within the productive process. For during those five long weeks, the absence of some 200 skilled direct workers prompted management to lay off no more than 150 employees and suspend another 30 for taking sympathetic action.* The shop stewards must have been equally disappointed with the response to the "Fighting Fund". Only £1,400 was raised when the target was probably double that sum.*

As a result, the strike was resolved very much on management's

terms. The fitters accepted a deal in which the major portion of their pay increase would come through a factory-wide productivity scheme as yet undefined by the company. Furthermore, the senior stewards were obliged to put their signatures to a formal "Declaration of Intent" though they were promised no more than "road maps" to the scheme by mid-October and given merely a verbal assurance from a management consultant, called 'Jock' Houston, that the deal "could be worth 2/6, 3/-".²⁰ The only tangible consolation the fitters could take from the deal was an interim payment of 1/5d per hour which compared favourably with the 1/- obtained by the patternshop and the 3d/- per week accepted by internal transport in quite separate productivity deals negotiated shortly after the fitters' return to work.²¹ The fitters also left the talks with the impression that their demand for the district average would be met by April 1969; but this would become the subject of a later dispute.

James ('Jock') Houston, formerly director of Production Organisation Services at Fairfields (Glasgow) Ltd. and the 1968 winner of the Gilbreth Award, was managing director of Higher Productivity Ltd. (HPL), a management consultancy established after the untimely demise of the 'Industrial experiment' at Fairfields.²² (More will be said about this 'experiment' later.) Houston's appearance at the pay talks showed that corporate management was directly involved and concerned to push ahead with a rather special kind of productivity scheme - though nothing was said at that time about how extra-ordinary it was going to be.

Meanwhile the fitters' modest gains seemed to encourage other skilled sections to pursue their sectional interests before the "road maps" of NPL's productivity scheme were finally drawn up. In September, skilled workers in the tool stores, factory fitting and repair fitting submitted separate pay claims. Sensitive to the threat these sectional demands posed for centralised pay bargaining, the senior stewards quickly secured the JSSC's support for a claim of 1/5d for all hourly-rated workers.¹³ However, senior management continued its preparations, apparently indifferent to the new mood among its hitherto 'sommolent' employees.

In September, the stewards were granted exclusive use of an office with an outside telephone line, and then invited to attend a one-week course at Esher "to understand and believe the tremendous proposals the co. have committed themselves to".¹⁴ Also during that month, senior management and their consultants met the full committee to explain the philosophy of their scheme. But crucial details still seemed absent. When Warr, for example, asked how they intended to measure productivity, the managers replied that they did not yet know. All they could do was re-assure the stewards that "the Board have decided that we are on the bottom of the crest (sic)...(and) by 1969 this can be reversed".¹⁵

These first halting steps towards a new corporatism and promises

of 'jam to-morrow' failed to impress those who had not secured the fitters' 1/5d. On 17 September, a month after the fitters' return to work, some 30 test bay fitters walked out over their pay claim. Hours later, they were followed by a similar number of machinists from the factory tool stores over the same issue. Next day, they were joined by 12 repair fitters who demanded the "District Average and the abolition of merit"; while 32 skilled workers in the pre-production and applied research departments submitted a joint application for "nothing less than the fitters' 1/5". Again, these events seemed to put more pressure on the senior stewards than divisional management which, while complaining about the strikes, made it clear that the company did not have the funds to offer any more interim payments and, at any event, there was "no hope of getting DEP to sanction more without productivity".¹² Thus, on the eve of a further "seminar" with senior divisional management and HPL consultants, the senior stewards made an abortive appeal to regional officials of the Department of Employment and Productivity to "sanction" their pay demand.¹³

At the "seminar" itself, held at Montford Hotel, Kenilworth, the senior stewards were told that the pay scheme would create earnings close to the district average in less than nine months, possibly even more pay within 15 months, and that the plethora of differentials would be removed in two years.¹⁴ After the rebuff from the DEP, this seemed sufficient to persuade the senior stewards to try and end the strikes. Next day, 26 September, a

works meeting agreed to suspend strike action until 10 October, the date management had promised to produce its "road maps" for the productivity scheme. By 2 October, there was a complete return-to-work. Eight days later, as promised, the senior stewards were finally presented with the programme for NPL's Productivity Payment Scheme (PPS).

They were told that the existing payment systems would be scrapped. The "six broad systems and 143 variations" of gang piecework involved "too many calculations for management" and the "men distrust(ed) it". In its place, a measured daywork system would be developed over the next 14 months. The proposed schedule is shown in table 2 below. This is worth comparing with the schedule, in table 3, which Houston and his colleagues at Fairfields developed two years earlier.

Table 2. The Schedule For Herbert's Productivity Scheme.

Phases	Schedule

Work Study	November 1968
Estimated Target Payment Scheme (ETPS)	July 1969
Measured Target Payment Scheme (MTPS)	December 1969

Source: Herbert JSSC, minute of meeting on 10 October 1968.

Table 3. The Schedule For Fairfield's Productivity Scheme.

Phases	Schedule

Activity Sampling and Work Study	March 1966
Estimated Target Payment Scheme	June 1967
Measured Target Payment Scheme	June 1968*

Source: Alexander and Jenkins, *Fairfields* (London: Allen Lane, 1970).

*Note: the third phase of the scheme was abandoned after the Fairfield's merger with UCS in February 1968.

The origins of PPS: "the Fairfields project"

At this point I think the "Fairfields' project" needs some consideration. In October 1965, the Glasgow-based shipbuilders, Fairfields, announced their closure. Concerned with the wider political implications of this event, the Labour Government funded a temporary 'rescue package' for the company and commissioned an enquiry into the future of shipbuilding on the Clyde. The 'rescue' deal included the unions' agreement to provide some financial backing and the workforce's acceptance of a comprehensive productivity scheme proposed by the prospective management team, headed by Sir Iain Stewart (a prominent local Tory and Chairman of Hall-Thermotank). Two years later, the Government merger of the company with the neighbouring shipyards (to form the UCS) prompted Sir Iain's resignation and those of his closest aides, including 'Jock' Houston.²⁰ However, during that interregnum, Fairfields' innovative, corporatist approach to the management of skilled workers had attracted considerable attention in business circles.²¹ It seems likely that Young, himself an enthusiast of managerial innovation in engineering, learned of, and decided to emulate, this "industrial experiment" even before Houston and his colleagues had quit Fairfields.

This background would explain the use of identical terminology in the two schedules. But what about the differences in timing? I would suggest there were several reasons which persuaded Houston

to draw up a much tighter schedule for Edgwick. Firstly, finance was far more restricted at Herbert's than at the shipyard - partly because of the former's drive to "restore liquidity", and partly because it simply did not have the generous state patronage that Fairfields once enjoyed. Secondly, Young lacked an important political advantage which Iain Stewart held over his workforce: he could not present their endorsement of the productivity scheme as a prerequisite to Herbert's survival.²² On the contrary, management had to respond to both an unprecedented level of sectional strike activity at Edgwick (and in such a way that did not increase the ebb of skilled labour from the plant or risk the co-operation of those who remained to deal with the flow of new jobs on the shopfloor) and a shop stewards' committee which, despite its obvious failure to shape events according to its liking, appeared to be thriving under these changed circumstances. Attendance at JBSC meetings rose from 33, at the beginning of July, to 55 two months later,²³ and the minutes, through their length and richness of detail - in which an unprecedented attempt was made to provide verbatim notes of some internal debates as well as negotiations with management - clearly convey a sense of enthusiasm and self-confidence which were reminiscent of the "red days" of the war. An illustration of these quite crucial differences between the Fairfields' "experiment" and Herbert's is provided by the Esher episode.

At the end of October 1968, Herbert's management despatched the shop stewards' committee to a week-long course at the ESTPU's

college at Esher to learn the mechanics of activity sampling and work study. All expenses were paid, including the beer, as Fairfields had done two years earlier. However, on that occasion the shipyard workers went to 'school' some months after work study had begun. Herbert's revision of the "Fairfield project" was obviously in response to the particular financial and political circumstances it faced; but the outcome did not help management's cause. Some shop stewards, including the works convenor, returned from Esher with the firm conviction that, despite the mathematics and the pseudo-scientific jargon, work study measurements were based on subjective assessments of effort and were, therefore, negotiable.** Furthermore within days of their return from Esher, the senior stewards had to respond to more sectional activity at Edgwick - this time involving unskilled and semi-skilled workers.

On 5 November, a group of about 10 fettlers stopped work for a day in protest at their working conditions. Six days later, nearly 200 machine shop labourers agreed to submit a claim for a "substantial increase in wages"; and some 40 skilled workers in the pre-production and applied research departments resumed strike action over their pay claim. Four days later, on 15 November, the same group of fettlers stopped work again, and were joined by 25 final inspectors who had decided to press their own pay claim.

Despite the fact that these actions could have caused no more

than minimal disruption to production, management appeared to be alarmed. "If we wish to kill the PPS, this is the way to do it," the plant managers warned. "These demands are a sabotage exercise," they said, and advised the senior stewards to "withdraw (their) support".** Once again the senior stewards felt obliged to try and end a number of sectional strikes in defence of the broader interests of the membership. On 21 November, a works meeting endorsed the Executive Committee's demand for "1/5 across the board" and an end to strike action as management could not be expected to negotiate "under duress"; but this time, three sections remained defiant. The final inspectors, pre-production, and applied research department workers only returned to work a week later, after it had been made known that corporate management had approved plans for progressive lay-offs across the plant.

How to share out 'savings' of £600,000

Negotiations on the productivity scheme were not resumed until mid-December - two weeks after the latest strikes had ended. The shop stewards' counter proposals were dismissed as unrealistic - particularly the claim for "1/5 across the board". At first it was claimed that the DRP would not sanction it, then it was argued that the company simply could not afford it. Eventually a scale of pro rata payments - based on skill grade, gender, race and age - was offered as an alternative. These payments were also

to be spread over all three phases of the scheme at a cost of £600,000, which, management claimed, was equivalent to two thirds of the total "savings" anticipated from the scheme. Three days later, the JSSC instructed the Executive Committee (EC) to negotiate for no transitional stage to the scheme, that is, no RPS, and "an all-round pay increase". This position was close to the proposals originally endorsed at a previous works meeting; but, from the secretary's notes, it is clear that the EC no longer treated this as a serious negotiating stance. Instead they seemed preoccupied with calculations on how £600,000 could be fairly distributed among the membership - 'fairly', that is, according to the traditional hierarchies in the plant - over the next 13 or 14 months.²²

It is significant that the senior stewards experienced little apparent difficulty in persuading the JSSC, and then the membership, to approve this turn of events. On 10 January, 1969, the company's proposals were approved at a works meeting; and six days later (and nearly two months behind schedule) a joint agreement on PPS was finally signed. The agreed pay scales, detailed below, suggest management had made some concessions on pay - (adult, white male) skilled pieceworkers were guaranteed an increase of 3/- per hour instead of 2/6d over a 14 month period - but the hierarchical character of the increases remained intact, signifying once again the hegemony of craft labour over the egalitarian impulse in the stewards' approach to pay bargaining. The data shown in table 4 below, extracted from the signed

agreement, can only give a limited impression of that complex of hierarchies because: (a) they detail the bonus payments to adult workers only and payments for those under 21 varied according to age and sex; and (b) the colour bar which confined black workers to certain jobs was (necessarily) covert.

Table 4. The Scale Of Bonus Payments For Each Stage Of PPS.

	Work Study	ETPS	HTPS	Total

Skilled d/workers	1/3d	7d	1/-	2/10d
" p/workers	1/3d	10d	1/-	3/-
semi-skilled d/w (male)	1/-	3d	6d	1/9d
" p/w "	1/-	6d	9d	2/3d
" building workers	1/-	3d	3d	2/-
female workers and lab's	9d	6d	6d	1/9d

Source: Productivity Agreement, Herbert Machine Tools, Edgwick,
13 January 1969.

Before concluding this section it is worth noting that the productivity agreement retained the original schedule for PPS, though the managers expressed the hope that the first phase (work study) could be reduced to six months while the old payment systems continued. It was also accepted that during STPS, that is, the transitional stage, earnings would be based on the average earnings of a mutually agreed period; and that the final phase, MTPS, would be a form of measured daywork based, where relevant, on the existing gang structure. Lastly, there was an agreement that no new pay claims would be submitted until six months after the commencement of MTPS, that is, sometime between July and September 1970. In the following sections I want to explore the continued transformation of shopfloor politics as each stage of the productivity scheme unfolded and became entangled in Herbert's corporate crisis.

Work Study at Edgwick: The First Phase of PPS.

The shop stewards had hoped that this first phase of the productivity scheme would be completed by June; but within days of signing the agreement it became clear that October was going to be the deadline since, in those nine months, management ostensibly set out to achieve four major objectives: to negotiate a new pay structure for all hourly-rated workers at Edgwick

(including those groups, such as the patternmakers and internal transport, who had previously negotiated their own productivity deals); to devise provisional or "estimated" job-times for all work in the machine shop, the fitting shops and the three foundries; to negotiate the ground rules for industrial relations under ETPS, the transitional stage to measured daywork; and, lastly, seek ways of raising productivity through the re-organisation of work. Even under ideal circumstances - 'ideal', that is, from management's perspective (such as those enjoyed by Iain Stewart in his first months at Fairfields) - these aims would have been ambitious for any management; but at Herbert's circumstances were far from ideal. A formerly 'somnolent' workforce stubbornly refused to go back to sleep, and the wider corporate crisis was beginning to seriously disrupt production and compel further 'short cuts' to measured daywork.

During those nine months the senior stewards faced their own kind of difficulties. PPS opened up a new kind of shopfloor politics at Edgwick, which promised the stewards' organisation 'a place in the sun' and higher earnings for their members; but the promise was always less than the reality, and the senior stewards had to respond to pressures both from an increasingly impatient membership and a crisis-ridden management.

In addition to providing a shopfloor perspective on that crisis, the stewards' minute books also offer some useful clues as to the nature of management's strategy behind the productivity scheme.

Behind the plan to scrap Herbert's variant of the gang piecework system and replace it with a form of gang-based measured daywork, it can be seen that senior management's central aim was to take direct control of production. Thus, alongside the major technical tasks of developing job-times on a more systematic basis and exploring ways of increasing productivity by the re-organisation of work, management had set itself the twin political objectives of bureaucratising the chargehands and placing the shop stewards at the centre of a formalised collective bargaining procedure. Among other things, this strategy represented a radical challenge to traditional managerial attitudes towards the unions. In place of the grudging tolerance of the stewards' presence, NPL plans positively asserted the virtues of plant-level corporatism.

Early revisions to NPL's brand of corporatism

On 22 January 1969, one element of NPL's corporatist package was unveiled: "worker representatives". The senior stewards were invited to nominate up to 12 section stewards who, after an 11 week crash-course, were expected to mediate in disputes over job-times as part of their duties as temporary work-study engineers. Initially, the senior stewards expressed some concern about the possibility of "poaching" by Management Services Division; but the idea was received enthusiastically by the JBSC, and over the next four weeks 22 nominations were put forward.²⁷ Despite this response, management soon began to amend its

proposals. Towards the end of April the senior stewards were informed that the company wanted only eight worker representatives who would receive just five weeks training. Later, they were also told that these new posts would be seconded to Management Services for only six months instead of 18.²⁰ Then, in May, management stated its intention to bring in 20 industrial engineers from three separate consultancies because, it was argued, the incumbent staff of 31 industrial engineers was insufficient to ensure the scheme stayed on schedule. For the same reason, management later justified the use of "group timing techniques" - ignoring the shop stewards' protests that there had been no mention of this form of work study at Esher.²¹

It is important to recognise that these were not minor revisions to the "Fairfields Project". At the Clydeside shipyard, Houston and his colleagues had tackled this initial phase of PPS by re-constructing the industrial engineering department from the top down, and with the broad involvement of the hourly-rated workforce. After twenty senior managers were recruited outside the company, they, in turn, appointed and trained 72 junior staff drawn exclusively from Fairfields' own shipyard workers.²² Following this the shop stewards were asked to nominate 150 worker representatives - one in twenty of the employees - who were given exactly the same training as the junior industrial engineers.²³ Some of the thinking behind this reform was explicitly stated in two studies of Fairfields. The advantages in recruiting almost all the industrial engineers from the workforce

were twofold: first, having done everything possible to appropriate its employees' knowledge of work, management would be more likely to obtain an accurate measurement of effort; second, internal recruitment took away workers' principal justification for their resistance to work study, namely, that the engineers were "outsiders" who had little or no practical knowledge of the industry.²³

These amendments effectively sabotaged the political strategy behind the consultants' attempt to reform the work study department at Edgwick. The incumbent rate-fixers, though retitled "work standard engineers" (and probably re-trained to a limited degree) had no greater credibility than before, either among the shop stewards or the membership in general; and eight worker representatives, given merely a 'taster course' on work study, were unlikely to persuade anyone that the character of the department was going to change as a result of their interventions. Lastly, the use of a previously unmentioned work study technique and the recruitment of 'outside' industrial engineers was bound to raise worries about management's incompetence or ill-will though it seems likely that Herbert's revisions of the "Fairfields project" were largely the product of expediency in the face of growing cash shortages and shopfloor militancy - urged on, perhaps, by the 'old' Herbert managers who strongly objected to HPL's "fraternisation" with the unions, as one former director put it.²⁴

At the same time such developments did not represent a total repudiation of HPL's version of plant-level corporatism by senior management. During April the negotiations on the so-called "Grey Book" - the rule book on collective bargaining under PPS - formalised the exclusion of chargehands from any meaningful involvement in negotiations over job-times. Among the crowded events of this period it is important not to miss the significance of this detail. Through management initiative - in particular, through Young's new senior executives and supported by the consultants - Edgwick's political world was being turned inside-out: the stewards were being pulled into the centre of factory politics and the chargehands pushed towards its periphery. What had been a trade union objective since the early war years was suddenly granted by management fiat.

At the end of May, the stewards' notes recorded another token of this determination to stay with HPL's corporatist strategy - as well as the resistance of some of the 'old' line managers to the new regime - when it was announced that Edgwick's assistant general works manager was being transferred to the Mackadown Lane site as a result of continued complaints from section stewards about his "arrogance" and "dogmatic attitudes".³⁴ An additional such token came at the beginning of June when the senior stewards were offered, and accepted, a "gentlemen's agreement" on a post-entry closed shop. (When this agreement came into effect, the EC promptly received a formal protest from 17 section stewards. Unfortunately, the notes are not specific about the

nature of their protest: perhaps the ideology of employer paternalism retained some support within the stewards' committee.)

What I have described as the 'bureaucratisation' of the chargehands commenced a few months later. In mid-August, a representative from Computer Services Division talked to the senior stewards about the new paperwork that would be introduced with the next stage of PPS. From the union papers, it seems the stewards were told that the computer would be used to record the "labour performance" of each production gang.²² Five days later, the chargehands were shown the same paperwork and told that, from September, they would have to run it in tandem with the manual system for a month, after which the computerised system was expected to operate on its own.²³ Here, too, the corporatist strategy was in evidence for both the sequence of these events and the senior stewards' presence at the chargehands' meeting would have been unthinkable in Sir Alfred's day, or even immediately prior to PPS. These events suggest that management, shop stewards and chargehands were assuming a radically different relationship to each other from those days when "the chargehand was the king pin" at Edgwick. Now the post was becoming a junior supervisory position bereft of any kind of privileged status within the management structure and even, perhaps, dependant on union representation to protect the incumbent's interests.

Slow progress on other elements of the 'package'

The stewards' minute books provide very little evidence to suggest that during this first phase of PPS management put much effort into raising productivity through the re-organisation of work. On 14 May, the senior stewards were informed that the Pre-Production Department was going to test out a flow fitting technique for new-build assembly work and, on 25 May, they were told that the New Projects Department - the first reference to this organisation in the stewards' minutes - recommended the closure of the Packing Department as one means of dealing with the problem of the shortage of floor space (created by the accumulation of stocks and work-in-progress). When the stewards complained about the lack of consultation, they were assured that the "plan was in its infancy". Oral testimony confirms the impression that many plans to re-organise work did not mature at this time.³⁷

The negotiations over the new pay structure - another of management's key objectives for this period - seemed to fare little better. Their progress, slow at best, was suddenly interrupted by strike action when, on 16 June, a Central Conference recorded a 'failure to agree' over the fitters' claim that, after the strike in August 1968, they were promised a pay rise in April 1969 which would bring their level of earnings up to the district average. (While the managers did not contest this interpretation, they argued that this agreement had been

superceded by the deal signed on 13 January 1969 which stipulated that the next pay increase for all hourly-rated workers - including the fitters - would not be due until the introduction of ETPS, namely, October 1969.) However this second strike by the fitters ended more quickly than the first. After only ten days, they returned when management conceded the legitimacy of their claim and offered another 'interim' pay award. The outcome of this strike is noteworthy for two reasons. First, though hardly a major victory, this new deal re-affirmed the fitters' dominance of sectional politics at Edgwick. (Other evidence of their power during this period can be taken from the fact that between January and October 1969, 12 out of the 30 sectional issues discussed with management related to fitters' grievances, and that when the JBSC secretary resigned to become a worker representative, his place was taken by Jim Rollaston, one of the fitters' stewards.) Second, and perhaps more importantly, it brought to the fore Herbert's growing managerial crisis since the fitters only accepted the compromise deal so quickly because of the threat of Edgwick's closure. From this point the company's perilous state was to have a direct and overwhelming influence on the shape of PPS politics.

Crisis

Earlier signs of a managerial crisis had been evident on the shopfloor: the decline in orders;²⁸ the frequent disruption of production caused by design modifications;²⁹ problems with component suppliers who "seemed indifferent to orders placed by us";³⁰ and acute labour shortages in some sections. Then on 19 June, the third day of the strike, John Lambert, at the time Herbert-BSA's managing director, made a personal intervention in the talks to tell the senior stewards about his division's "grim two weeks on profitability" which now placed both Mackadown Lane and Edgwick "in deadly trouble". He accepted that this crisis was partly of management's making - the directors had "tried to change too many things at the same time" - but it did not matter how blame was apportioned. What mattered now was that with Edgwick poised "on the brink of closure", the issue which had prompted the strike was irrelevant. The works convenor's retort was that "the company cannot sell us poverty"³¹ and, three days later, he even appealed to 'Jock' Houston to intervene on their behalf.³² However, as I have said, by the end of the week the fitters returned to work on terms far short of their initial demand. Instead of receiving an increase of 2/- per hour - the figure calculated to bring their earnings up to the district average³³ - they accepted interim pay rises of 10d for skilled- and 9d for semi-skilled workers.

This central message of the strike was underlined when, only a

few days later, Herbert-BSA's production director outlined a programme of compulsory retirements for Edgwick's veteran employees. At that time, there were 94 men and 37 women over retirement age and another 51 due to retire within the year. This represented approximately 7% of some 2,500 hourly-rated workers at the plant.⁴⁴ This "supernumerary workforce", as Young had once described them,⁴⁵ had long been identified as one of the costs of employer paternalism, an anachronism in Herbert's new era, and an obvious target for reform. But, given the circumstances, it was not surprising that the senior stewards interpreted this initiative as a form of "hidden redundancy"⁴⁶ and demanded corresponding payments. Management decided to drop the issue for the moment. (A programme of compulsory retirements - with certain financial inducements attached - was not negotiated until November 1969, and accepted in a works ballot the following month.)⁴⁷ But the message remained clear: the productivity scheme would probably never provide a route to high earnings. I would suggest that after these events, the senior stewards placed even more importance on achieving the only objectives that remained open to them: a coherent and relatively equitable pay structure based on a form of daywork; and a formalised collective bargaining procedure which enshrined the principle of "mutuality". The former task preoccupied both sides in the remaining months of the first phase of PPS.

'Fixing' the new pay structure

Negotiations on the new pay structure under STPS focused on what were called the Fall Back Rates (FBRs), or base rates, for each grade. These talks began in May, but were soon disrupted by the fitters' strike and were not resumed until the end of August, which left barely more than one month for both sides to reach a final settlement. It is difficult to understand why it took so long to re-open negotiations on this particular subject, unless both sides were concerned about its potential for sparking off another angry summer of sectional disputes. Certainly, the minute books suggest that the senior stewards presented the proposed rates to the membership in a way which was designed to minimise those disputes. Through September and into early October, the proposed FBRs were put to a series of meetings which brought together people who were intended to share a common scale of base rates. For example, there was one meeting for all semi-skilled day workers and another for millwrights, garage fitters, boiler-house fitters, ardoloy demonstrators, skilled cutter-grinders, skilled building trade workers and maintenance electricians. The response of the membership to this 'fix' is revealing about the character of inter-union politics within the JSSC and the relationship between the senior stewards and sections of their membership.

The patternmakers and foundry workers - whose unions were not represented by the three senior stewards - rejected the new pay rates and forced more bargaining. The maintenance electricians,

while similarly unrepresented, did not have the power to prevent the senior stewards accepting a provisional rate on their behalf. (The electricians had to wait until after the RPS deadline before the senior stewards were prepared to re-negotiate better rates.) The majority of workers within the TGMU and AUEW passively accepted the 'fix', though some sections registered a protest. "This is not the right deal," complained one section steward, "the company are pulling a fast one."¹ Another worker warned "Brother Rollaston not to try and use (the) bulldozing tactics he had been accused of at previous meetings."²

The women workers could not complain of "bulldozing tactics". On the contrary, the minutes suggest that they were given every encouragement to press for better rates. Even as late as 6 October, one week before the deadline, the senior stewards were advising them to reject the proposed FRs. This concern over women's pay was also evident earlier in the year when the senior stewards attempted to secure "equal pay for equal effort".³ However this concern over women's pay did not reflect a radical change in attitudes towards the status of woman workers, either among the women themselves or their male colleagues for the 'equal pay' campaign focused on the demand that:

"Women machine operators should get at least the lowest semi-skilled rate of a male."⁴

Not surprisingly, there is no record of any protest action when management insisted that the issue had to be settled at a national level first. Seven months later, when the company

refused to make any significant concessions to women on the FRRs, the works convenor eventually advised acceptance of the new rates though they were not, as he put it, "an answer to a maiden's prayer."²²

Paradoxically, the stewards' efforts also demonstrated women's marginality in factory politics. I am sure the senior stewards were concerned about the abysmal wages of this section of their membership; but they also knew that a dispute over women's pay would never jeopardise the productivity scheme. Unlike the packers in 1964, these women showed no signs of taking direct action over their grievances.

If women's pay was a politically marginal issue for the senior stewards, there can be little doubt that, during the six or seven weeks of talks over the FRRs, their chief concern was over the base rates of the white male, skilled and semi-skilled pieceworkers in the main shop. This is evident, for example, in the way the convenor presented the new pay structure to the workers as "an attempt to reduce the number of rates from 124 to 20."²³ These figures only applied to the 88 piecework gangs in the main shop.²⁴ If Doughty had included all the other sections affected by the pay talks, he would have counted over 40 new base rates.²⁵ This same preoccupation with the piecework gangs is also suggested in the order with which the rates were negotiated. First, the shop stewards established agreement on the broad principle that skilled pieceworkers shared a common base rate.

They then negotiated rates for the male semi-skilled pieceworkers, as well as other sections in the machine shop. Last of all came the three foundries and the patternshop.

Broadly, the new pay structure (which excluded the toolroom) had been determined by 17 October 1969 and was as shown in table 5 below:

Table 5. The New Base Rates Agreed Under PPS, October 1969.

(A) In the main factory and patternshop:

chargehands' differential	£2.10.0
male skilled pieceworkers	£30
" " day workers	£27 - £31
" semi-skilled p/w	£23.6.0 - £27.8.0
" " d/w	£20.6.0 - £24.8.0
" labourers	£18.10.0
female semi-skilled p/w	£18 - £19
" " d/w	£15.15.0 - £17.5.0
apprentices	£9 - £20
junior males p/w	£8.4.6 - £21.18.6
" females "	£9.10.0 - £16.5.0
" " d/w	£8.10.0 - £14.10.0

(B) In the three foundries

skilled p/w	£35.10.0 - £41
semi-skilled p/w	£25.6.0 - £26.6.0
process workers	£22.6.0 - £25.6.0
semi-skilled fettlers	£32.8.4 - £36.10.7

Source: Herbert JBBC, minute dated 17 October 1969.

STPS: the Troubled Transitional Phase.

It did not take too long before management's handling of this second phase of PPS precipitated a fresh crisis in industrial relations; one which illustrated the divisions within senior management, the frail links between stewards in neighbouring Herbert plants, and the senior stewards' anxieties of a possible 'backlash' from the most privileged sections of the workforce.

The new pay structure at Red Lane

Negotiations on the base rates continued until Friday, 17 October, 1969, which management insisted was the last possible moment for the new wage data to be fed into the computer. A few days after this deadline, news broke of the new pay structure at Herbert Associate's Red Lane plant.²² The details that concerned the EC, when it met that morning, were the rates for Red Lane's 94 skilled pieceworkers and 18 chargehands for they drew unwelcome attention to the gains foregone by some sections as a result of the senior stewards' support for a more equitable pay structure. Only later did the shop stewards note that semi-skilled and unskilled workers at Red Lane had lower base rates than their counterparts at Edgwick.²³

The base rate for a skilled pieceworker at Red Lane was 10/- more than at Edgwick; "light merit" could increase that basic to £31.5.0, and "high merit" to £32; the "junior chargehands" enjoyed a £2.10.0 differential over workers on "high merit"; and "senior chargehands" had a base rate of £36 which represented 11% more than any machine shop chargehand at Edgwick.²² As Doughty had had to cope with threats of physical violence from some of the highfliers among Edgwick's chargehands following the pay talks,²³ and given the fact that the two plants were separated by barely more than one mile, the senior stewards' immediate reaction was understandable. At a meeting with plant management on 22 October, they complained that nine months of bargaining had been "destroyed" and warned of "imminent industrial action" by an uncontrollable membership. However, apart from the protests of a few chargehands, the workforce seemed remarkably quiescent and, at the end of the week, the EC was relieved to find that it may have "over-emphasised this problem".²⁴ If the senior stewards had exaggerated some of the internal, political consequences of the news from Red Lane, there is nevertheless no doubt that the incident demonstrated to them a serious weakness in communications between shop stewards working in near adjacent factories under common ownership. It was a problem they tried to tackle over the next few weeks.²⁵

The news of the deal at Red Lane also illustrated the ineptitude of group management's de-centralised pay policy. To allow

divisional management at one of the Group's smallest companies, Herbert Associates, to devise a pay structure which would obviously cause anger and resentment among key sections of firstline management at another plant which was not only the largest in the Group but also the pilot for major reforms in industrial relations,** was politically ill-considered to say the least. It was also, I suspect, one more sign of the division between the 'old' and the 'new' executives, for the managing director of Herbert Associates was Sidney Muirhead, a Herbert veteran, and a man politically comfortable with the paternalist pay structure negotiated at Red Lane.

Muddling on

From this inauspicious start, ETPS seemed to muddle on from one crisis to the next. After only a few weeks, the estimated times, which were supposed to determine bonus payments for the next six months, proved so contentious that the stewards threatened to quit the scheme. Herberts' "old ratefixers", as the stewards called them, were confronted by a shopfloor ban initiated by a chargehand. The worker representatives proved of doubtful value to both the company and the shop stewards, while management's desperate efforts to contain the symptoms of the corporate crisis continued to disrupt industrial relations at the plant. The only area where management appeared to face little opposition was in the implementation of the next phase of the Computer Loading and

Scheduling System (CLASS).

Estimated times: a 'disgraceful pup'

Payment under ETPS phase began on 20 October. On 4 November, the senior stewards complained that the new, estimated times were "a disgrace"" and on 18 November, the JSSC resolved to quit the productivity scheme unless management guaranteed a minimum payment based on a 98% pay performance. This threat had its desired effect. Next day, the company agreed to guarantee the productivity bonus at 94% until the end of the year. However this decision only won a temporary respite for management. A month later the senior stewards protested to Maurice Ruck - the newly appointed Joint Managing Director of Herbert-BSA - that "In ETPS we bought a pup", and they presented him with the results of their own attitude survey on the estimated times to demonstrate the widespread dissatisfaction with this aspect of the scheme. Ruck congratulated the shop stewards on their poll and voiced his own criticisms of PPS. Estimated times were, he said, "worked by a conversion factor on (the) old times" and he knew "there would be problems right from the start which would cause disharmony between men and management."" At the end of December management felt obliged to continue guaranteed bonus payments for the remainder of ETPS, and when, on 8 April 1970, negotiations began on the arrangements for the bonus system under MTPS, it was settled that performance would be guaranteed at 95% for a further

six months or until 50% of the job-times were measured and agreed, whichever was sooner. One consequence of this settlement was that the start of the final phase of the productivity scheme passed without notice in the shop stewards' records. Indeed, as I will later show, MTPS itself appeared to be no more than a continuation of the same muddled arrangement.

These difficulties over estimated times also aided the shop stewards' in their claim for "mutuality" over measured times. Management finally accepted the "general principle" of "mutuality" in March 1970.²² However, as I will show later, this was only the beginning of another long procedural wrangle.

"A human problem"

Shopfloor discontent with progress on the productivity scheme took a new form when, in mid-February, a chargehand spotted a work standard engineer recording "jigs and fixtures" on the shopfloor and promptly ordered him off the (vertical milling) section. Doughty defended the chargehand's action: "the methods used are our members", he claimed, and even warned of a "re-action from the shopfloor" if the "rate-fixers" re-appeared and "asked questions" about production techniques.²³ At first, management challenged this position. Afterall, it was hardly consistent with the shop stewards' formal support for PPS. But at the works conference, held on 7 April, the company accepted the

union official's view that the dispute was "a human problem" which had to be settled domestically. In effect, the "problem" was put to one side to save the scheme.

In addition to a general discontent with PPS I would suggest that this dispute reflected a particular dissatisfaction with the former "rate-fixers", who were now thoroughly discredited by their association with the infamous estimated times, as distinct from the outside industrial engineers. The maxims of the "Fairfield project" were proved right, but apparently for the wrong reasons: management's use of "outside" engineers had provoked shopfloor resistance because their presence legitimated the shop stewards' complaints about the incompetence of Herbert's own work study department.

I also think it is significant that it was a chargehand who acted in defence of his section's 'craft controls'. In one way it suggests the ideology of the old gang system was still very much alive. There were, it seemed, some chargehands who still regarded themselves as akin to sub-contractors in their relationship to plant management. In another way, the incident could also be interpreted as one more piece of evidence of the progress of the chargehands' political re-alignment. More, albeit indirect, evidence of the chargehands' disaffection came on 20 February when management complained that people were leaving work too early. This was the first occasion the senior stewards had recorded such a complaint since the early war years. Events such

as the negotiations over the "Grey Book" and the introduction of CLASS, which I will discuss later, were forcing the chargehands to realise their interests were best served by a closer alliance with the shop stewards.

Mutual doubts about worker representatives

Meanwhile, both managers and stewards were finding their separate reasons to doubt the value of worker representatives. Sensitive to the danger of "poaching" by Management Services Division, the EC had decided, as early as November 1969, that it would meet the worker representatives on a weekly basis. To a certain extent, these meetings proved useful to the shop stewards. At one such meeting, one of the representatives complained that "he was deliberately detained in the office on menial jobs". At another meeting, the EC was told that "arbitrary allowances are now being built into MTFS times".** Unfortunately, all these complaints came from one person, Bro. Grubb, who had served as the JSSC's secretary before this latest appointment. The other representatives voiced no grievances and seemed unperturbed by the managerial tactics that angered Grubb. There was a very real danger that these men could be "poached", or co-opted, by management. Confirmation of this came soon enough. On 23 March 1970, the EC decided that two of them, Wildsmith and McNaught, "should be relieved of their foundry responsibilities and transferred to Fitting" as a result of persistent complaints from

colleagues.

The impact of the corporate crisis on the shopfloor

During ETPS, the shop stewards recorded more evidence of Herbert's deepening crisis, which in some cases had a direct impact on industrial relations at the plant. For example, at the beginning of December, workers in Electrical Commissioning organised a one-day strike, followed by an overtime ban, to press their claim for staff status comparable with the service engineers. Initially, management opposed the demand, arguing they had been in "a very non-typical position through major changes in the last 18 months...(where) machines had been put out before being fully proved"; but the claim was conceded a month later.** Simultaneous with news of Muirhead's sudden death on 8 December 1969, the senior stewards were informed of Wornauld's "departure from the company". As Wornauld had been director of Management Services Division, his exit could be interpreted as one more sign of the increasing irrelevance of PPS in the face of Herbert's corporate crisis. This interpretation is supported by a note dated 16 December which recorded Ruck's statement that production had been disrupted by shortages of parts and scarcity of "the right sort of labour". In the New Year, management blamed "an acute labour shortage" when the shop stewards threatened to withdraw their members' co-operation in training school-leavers if the company continued to flout EITB standards for

traineeships;" and two months later, management had to accept similar criticisms of its recruitment of young workers for the foundries. The secretary's notes make it clear that both plant management and senior stewards viewed these practices as desperate remedies. The former admitted to a certain "unease" about this particular solution to their labour shortages and felt obliged to accept the shop stewards' demands. With regard to the foundries, management agreed to stop the recruitment of school-leavers and pay the adult rate at 18.⁷⁰ As for the machine shop, the youths were given the opportunity to take the entrance tests for an apprenticeship after a compulsory seven-week crash course in engineering practice.⁷¹

Computerisation: an apparent success story

In contrast to the disputes over the shopfloor presence of work standard engineers, or about estimated times and the recruitment of young workers, management seemed able to continue to implement its plans for the computerisation of the shop scheduling system largely at its own pace. In November 1969, some chargehands had complained - through the shop stewards - about the excessive paperwork generated by the new system; but management clearly felt no need to respond to this criticism until January 1970 when it unveiled its plans to computerise production planning in the machine shop from 10 February (followed by the "factory" machine shop in June and stock control at the beginning of 1971). Even

then, the managers were able to stall talks on the chargehands' grievance, for the remainder of MTPS, by proposing to bring in work study engineers to analyse the paperwork of three selected chargehands.

Aware of the adverse employment effects this new expansion of CLASS could have, particularly for clerical workers in progress and stock control, the EC registered a "strong protest at the lack of prior consultation." Again, though, the "protest" did not seem to worry the managers. They gave vague assurances that redundancies as a consequence of computerisation were not anticipated "in the immediate future", and, for the next four months, there the matter rested.

MTPS: the Final Phase of PPS, April 1970 to December 1971.

Unlike the earlier phases of the productivity scheme, MTPS is difficult to periodise partly because, in a sense, it never happened. Measured daywork across the entire plant remained an elusive goal for both managers and stewards. Its scheduled start date was postponed until 13 October 1970; but even then only the maintenance electricians, in a separate productivity scheme, went onto measured daywork, and it was not until some time after February 1971 when two turning sections piloted measured daywork

under MTPS proper. Similarly, there are difficulties in identifying the conclusion of this period if it is linked to the demise of PPS. On 8 December 1971, a works meeting accepted a pay deal which included an agreement to negotiate an alternative to PPS after March 1972, but the minutes suggest that before that date a number of machine shop gangs had gone onto an ordinary daywork system following the re-organisation of their work under group technology or, as it was called then, "cell production".²³ (Unfortunately, the minutes for the period from 15 December 1971 to 6 March 1973, are unavailable and oral testimony is not detailed enough to help reconstruct key events during that period.) In any event, a fitting conclusion to this period should not be sought in possible dates when the project of measured daywork was finally abandoned. Long before its formal demise, PPS had ceased to have any relevance to shopfloor politics. Instead, the series of redundancies that racked the membership from February 1971 onwards offer a more appropriate ending to this period for they brought an end to most of the hopes both the managers and stewards had put into PPS. The only difficulty with choosing such an ending is that it runs into another story that could be told for these redundancies also marked the start of profound crisis of morale within the stewards' organisation which lasted until 1974 when the election of a Labour government suddenly held out the prospect of a state-sponsored rescue. With these considerations, then, this section will confine itself to a discussion of events between April 1970 - the date that should have marked the commencement of measured daywork - and December

1971 when ten months of negotiations and arguments over redundancies made their own unmistakable mark on the character of the stewards' records. Within that periodization I will address two main questions: why management abandoned the productivity scheme, and how the stewards responded as events radically transformed the political terrain once again.

Different goals

As with an earlier phase of PPS, in April 1970 both sides agreed to the postponement of MTPS for at least the next six months. During that interval, most of the talks were concerned with two issues: the formalisation of the grading structure for semi-skilled workers; and the rules for disputing and accepting measured times.

Despite their past disappointments with the scheme (over such matters as worker representatives, estimated times in the machine shop, and, above all, the failure of the scheme to raise pay to the district average both for the present and the foreseeable future), the senior stewards continued to demonstrate a remarkable enthusiasm for PPS. When, for example, the number of worker representatives had declined to four, half their initial number - chiefly as a result of promotions into supervisory staff - only the senior stewards seemed concerned to find replacements.²⁴ (In the event, another worker representative left

in the following year.) On another occasion, the senior stewards actually complained that "line management (had) seemed hell bent" on measured times, but "now things have gone dead".⁷³ A similar grievance was recorded over the negotiations on the grading structure.⁷⁴ Even as late as January 1971, in the middle of talks over redundancies, the shop stewards still appeared anxious to see the introduction of MTPS, initially on a six-month long pilot basis, in the turning sections of the machine shop and "factory". I would suggest that this was the case because they believed the scheme still offered some tangible political benefits to the shop stewards' organisation.

The process of collective bargaining over three years had moved the shop stewards into a central position in shopfloor politics, but they must have been aware of the vulnerability of that new-found authority: what senior management had granted could, almost as easily, be taken away. Despite the apparent growth of the JSBC and despite the flurry of sectional strikes which alarmed management in those early days of the PPS talks, incidents recorded in the minute books suggest that, as a superstructure, the shop stewards' organisation still rested uneasily on the bedrock of the membership. For example, in May 1970 the convenor complained that he had seen a semi-skilled worker operating a machine in a "skilled area". Five months later, a section steward warned management during talks on toolroom merits that the "present position could result in (the company) losing the younger members"⁷⁵ and so demonstrated an

awareness, which the convenor shared, that the drift of labour and not industrial militancy was still the chief mechanism which produced higher pay at Edgwick.^{7*} Against such a background I would argue that the senior stewards were keen to see the realisation of MTPS, if only in a few sections, because it would confirm the demise of Herberts' variant of the gang system and foster a form of shopfloor politics more akin to that of the other, large engineering plants in Coventry.

Despite the senior stewards' enthusiasm to see the introduction of measured daywork it was obvious, as the deadline for new pay talks approached, that MTPS was not going to be the central issue. With less than 5000 measured job times out of 200,000, the implementation of the last phase of PPS must have seemed a distant goal. At any event, the negotiations dealt only with the size of the pay award and how it should be divided up. In August, the shop stewards submitted a claim for a 14% increase in October exclusively on the base rate - equivalent to a rise of £4.15.0 for a skilled worker at Edgwick - which, they calculated, would bring pay in line with the district average. On 6 October, the managers responded with an offer of £1 that month and a little less than £2 in stages over the next 18 months, linked to agreements on mobility between skilled areas, multi-machine manning, and the involvement of work standard engineers in the (job-times) disputes procedure.

Contrary to a stated determination to ignore management's pleas

about the company's difficulties ("c/o financial difficulties none of my concern, none of my making" Doughty told a works meeting),⁷⁷ the EC quickly scaled down its demand to £3: £2 in October and £1 in April 1971. When Ruck, then managing director of Herbert-SSA, gave his "word" that the company was in serious difficulties - his "word" had to suffice for he refused to "open the books" as the stewards had requested - the convenor found he was powerless to dissuade either the EC or the membership to reject an even smaller offer, namely, £1 that month and £2 in April.

Another significant feature of these pay talks is that, while the senior managers seemed to place much importance on the role of the work standard engineers, they readily admitted that the productivity scheme was "no use to the (trade unions) and not much use to the (company)",⁷⁸ and so agreed to link 10/- only to the productivity bonus. The explanation for this apparent inconsistency, I believe, is that their objectives were rapidly shifting. Instead of trying to increase productivity by offering higher pay on tighter job-times, they now had a vague hope of achieving that aim through an undefined mixture of rationalisation involving a considerable number of redundancies, some changes in the organisation of work, and an intensification of labour largely imposed by the threat of more redundancies. I say it was a 'vague hope' because the stewards' minutes suggest that the senior managers did not have a clear alternative to PPS. Instead there was a confusion of ideas. There were plans to use

CLASS to make the build programmes more responsive to short-term changes in the market - in one manager's words: "(the company) should build machines according to the market (and) not along the lines of the old production system".²¹ The senior engineers had plans to introduce group technology (though they had to wait until 1972 before being allowed to implement them - after the "debacle of the 1968 era", the engineers' prestige was very low within senior management). Some new machines were due to be moved onto the shopfloor.²² There were also the customary ideas about 'imposing' mobility of labour and changing the manning on semi-automatic and automatic machinery as a condition for pay rises; but nothing more was said on this point after the stewards offered acceptance on a voluntary basis.

The relatively unformed character of management's strategy at this time is reflected in the confused way the plant managers moved towards the implementation of a major redundancy programme (though I would not deny that management may have used such confusion to disarm the stewards). At the end of November, after the senior stewards referred to "rumours in the shop of (a company) statement", works management denied one was being prepared and assured them that there would not be a "surplus of direct labour" if the build programme could be stabilised. However, "detailed investigations by MSU" did indicate the need for redundancies among the indirects.²³ This news was enough to persuade the senior stewards to convene a special meeting of the JSSC and a works meeting, so that when the managers later

broached the idea of a redundancy procedure for indirects, the senior stewards were able to threaten a range of sanctions short of striking. Almost apologetically, management promptly agreed to restore the 'status quo' and take the matter through the (national) disputes procedure. Later, at a Works Conference on 9 December, management suddenly claimed that the need for 28 redundancies among the indirects arose "from circumstances outside PPS"; but, even at this stage, it is clear that the stewards had very little information to indicate corporate management was actively considering more radical changes.

"A drastic exercise in sheer survival"

After the Works Conference in December 1970 had ended in a 'failure to agree', the redundancy issue seemed to be put aside, almost forgotten. There was one occasion, early in the New Year, when the senior stewards asked about rumours of redundancies in the "factory"; but they were given a bland denial⁴ and collective bargaining seemed to resume its routine faze of sectional grievances and the seemingly interminable arguments over the disputes procedure on measured times.⁵

Thus preoccupied with efforts to see the implementation of MTFS - even as late as 22 January the senior stewards were pressing for some sections to go onto measured daywork on a trial basis - it is notable that Neale Raine's appointment as Herbert's first

Chief Executive was not even mentioned in the minute books until 25 January when, in a request on behalf of the AM Group Stewards' Committee to see the main board, works management advised they write to him. Raine, "a new, tough, managing director***, was appointed by Sir Richard Young in December 1971, largely, it has been claimed, as a result of the banks' dissatisfaction with the company's progress in reducing its debts." On his appointment, Raine presented the board with a five year plan. It was a "drastic" one. He aimed to reduce "overheads" by centralising the seven Herbert companies into one, and rationalising the Group's activities by closing down 13 or 14 of its 17 factories, and reducing the product range from 300 to 200 different types of machine tools. The *Sunday Times* commented:

*"Raine's 5 year plan is clearly a desperate exercise in sheer survival and, as such, will probably be successful."**

Of course, at the time none of this was put to the stewards. On the contrary, the minutes show that their anxious enquiries about the possible truth of shopfloor rumours of imminent, massive redundancies were deflected with more bland assurances. However, by their own means the senior stewards were able to gather some facts on Raine's career which re-inforced their fears. In particular, they discovered that in his previous appointment at Associated Engineering he was responsible for pushing through a major programme of redundancies in the face of fierce trades union opposition.** Perhaps it was this knowledge which prompted the stewards to convene a works meeting on 4 February 1971 and

call for strike action if "butcher" Raine attempted to implement compulsory redundancies at the plant. With only three votes against, the membership supported the motion.

This strike decision seemed to bring matters to a head. For, the next day, Friday, 5 February, the company announced its intention to carry out 810 redundancies throughout the Group, 443 of which were to take place at Edgwick. Senior management invited the stewards and staff representatives to negotiate details of the plan on Monday, 8 February; but it was made clear that individual notices would be issued on that same day and the whole exercise completed by 10 March. Immediately after this consultation, the JSBC decided to convene a works meeting on Monday morning and press for strike action without waiting for the first dismissals as the redundancy notices, however "tentative", were seen as potentially divisive.

At this second works meeting, the senior stewards and staff representatives (from DATA) faced hostile and anxious questions from their membership: "Are you trying to bring this company to its knees?", asked one; "Are you a communist?" another asked the convenor. But Doughty secured the decision he wanted after arguing that management was only prepared to re-consider cases of hardship and the redundancy notices would set "men against men".¹⁰ However, at the end of the week a third works meeting had to be convened as a result of the "collapse" of the staffs unions' opposition. The minutes show that Doughty desperately

sought to continue the strike. He claimed, incorrectly, that management refused to consider volunteers, criticised the AMF officials' statements on the redundancies as "double-edged" and dismissed the staff unions' deal as no more than a reiteration of the company's original offer. It was a futile stand. By a majority vote, the membership decided to return to work."²

Despite its swift conclusion, the strike probably persuaded management to give the shop stewards at Edgwick more time to find volunteers for redundancy. Initially, the deadline was extended for three days to 18 February, the date of the Local Conference, then it was extended a further week to 26 February. Elsewhere in Coventry, Herbert's employees were notified of their dismissal on Friday, 19 February.

The initial press statement explained that the redundancies were an attempt to "reduce overheads because of weakening world markets and continuing cost inflations".²³ Later, management elaborated on part of this terse statement by expounding on the new-found 'sins' of vertical integration. The company, the stewards were reminded on one occasion, had an "obligation to employees and shareholders to become profit-making"; but management was hindered by the fact that this former "engineering firm was now (involved) in haulage, carpentry, fabrication. If investigation shows savings could be made by using specialist labour, (then it would be a) common-sense thing to do".²⁴ At other talks, this intention to sub-contract out as much indirect

work as possible (including the toolroom and patternshop) was referred to as a "change of co. policy" which became lumped together with statements about plans to "lop off" £2 million from "overheads"" and the dismissal of seven directors.""

The second part of management's explanation for the redundancies was about the need to respond to declining orders. Significantly, this strand of the argument was repeated more frequently. Indeed, sometimes it was presented as the sole reason for the cuts. For example, at the Local Conference on 18 February, the trade unions were told that the company was "dealing with large scale redundancies due to (the) order book". I would suggest that this imbalanced presentation of the crisis was politically calculated. It was intended to convey the impression that the redundancies were essentially the product of something outside management's control. Hence the absence of any reference to Raine's five-year plan, his "desperate exercise in sheer survival" which - the *Sunday Times* reported after the event - involved "lopping off" £5m from overheads by closing down thirteen or fourteen factories.

The shop stewards were conscious of senior management's disingenuousness. This is strongly suggested in one minute which records the managers' statement that the unions would have been consulted "if (there had been) cost reductions in one department as opposed to five". Certainly, they were not persuaded that contracting out work would save much money, and they realised,

from past experience of Edgwick's production difficulties, that the cuts had to be related to more fundamental issues. However, it seems the stewards were not aware of the full scope of Baine's "desperate exercise", though the minutes suggest that on one occasion the senior managers revealed more than was politic.

At that initial meeting on 5 February, when the staff representatives and senior stewards were told that the redundancies included seven directors, Ruck remarked on the "magnitude" of the problem. This provided the opportunity for Doughty to comment that the "cost of (the) seven Companies must have been colossal". However Lambert, another senior executive at the meeting, promptly cut off that line of discussion as he had no intention of encouraging speculation on the causes and likely extent of the redundancies. They were "not here to talk history", he said, but "to talk facts". Not surprisingly, this did not discourage Doughty from telling his membership later that the cuts were the product of an "inept" management and, more specifically, linked to the costs of managerial re-organisation in the late-1960s. Three years ago, he told a works meeting on 8 February, there were 12 directors. Now there were 73. The "seven companies must have cost a fortune", he concluded.

It is quite clear then, that the shop stewards had anticipated major redundancies, but it did not seem to help them prepare stouter defences when the crisis broke. At Edgwick their "solidarity" with the staffs unions collapsed almost within hours

In the three days prior to the Local Conference on the redundancies, the senior stewards at Edgwick organised 15 separate, sectional meetings. They presented management's "hit list", which detailed the number of redundancies sought in each occupation within each section, and then recorded the names and clock numbers of all volunteers. After 19 February, when the deadline was extended another week, the section stewards were asked to continue this compilation. On 23 February, it was minuted that 163 workers had volunteered for redundancy of whom 114 had been accepted by management. The absence of any later figures on volunteers suggests that, on 26 February, some 200 hourly-rated workers were issued with notices of their compulsory redundancies. Given the news of other redundancies in Coventry at that time and the rather small ex-gratia payments the company was offering to volunteers, this outcome was hardly surprising. The sums involved ranged from £25 for those with less than 10 years service to £125 for employees with over 40 years. These figures should be compared with the Coventry district average which was then £40 per week.

The aftermath

The psychological impact of these job cuts cannot be overstated. Though, as I explained in earlier chapters, 'jobs-for-life' was a myth for sections of semi- and unskilled workers at Edgwick -

they had been exposed to compulsory redundancies as recently as the late-fifties - for many skilled employees that kind of job security had been real enough. For them the cuts meant the end of a very powerful paternalist tradition which had given them a sense of their own worth, their own dignity. Also, oral evidence suggests that the redundancy notices were issued in a particularly insensitive manner. John Davies, then a draughtsman at the Exhall plant, recalled that in his office the process seemed to take hours as the listed men were summoned, in turn, to a personal interview with the section manager. Angered and shocked by this experience, John wrote a poem about the redundancies. Ten years later, when I met him, John could still recall the opening verse:

*"Sir Dick, as you lie snug and rich in your bed
Think over your actions and what you have said
What you caused by the stroke of your elegant pen;
As you dream, you'll remember \$10."*

The minute books offer a more prosaic record of the psychological impact on some section stewards. At a JSSC meeting held immediately after the strike had been called off, the secretary noted tersely:

"Duties being lapsed by some (shop stewards)."

Towards the end of this redundancy 'exercise', that is in late February and early March, the minutes suggest that most talks with (plant) management were concerned with disputes over the

transfers of supervisory staff onto the shopfloor. In most cases, the grievancies related to the movement, or demotion, of assistant foremen to chargehands in the fitting shop. The shop stewards complained that staff were being given preferential treatment or that some of their colleagues were being dismissed to allow these "transfers" to take place. The fitting shop mounted the only recorded resistance where there was a brief ban on CLASS paperwork.⁶⁷ However, one transferral which particularly angered the senior stewards concerned the movement of an assistant foreman onto the grinding section in the toolroom. The minutes record these comments by Doughty:

"Would use all possible means to prevent this move, the principle stinks but...at this stage we cannot marshal the forces to fight this"

The shop stewards' fury suggests that the assistant foreman, formerly a long-service toolroom worker called Warr, was none other than Doughty's predecessor.

In addition to demonstrating the anger and frustration felt by the shop stewards about the redundancies, the row over these transfers suggests that plant-level management had also been surprised by the extent of the cuts sought by the corporate executives. Other evidence to support this idea was mentioned earlier, namely, the way the magnitude of, and rationale for, the redundancy programme suddenly changed. More evidence is contained in the shop stewards' detailed notes on management's "hit list". It shows that in the foundries, "factory" and machine shop, the

company intended to dismiss 29 trainees, many of whom had been recruited only months earlier and (as I have shown) despite some opposition from the shopfloor.

When the negotiations over PPS were resumed on 9 March, the atmosphere was less than cordial. The senior stewards informed management that the membership would be advised to challenge all unsatisfactory measured times and do so under the "National Agreement" as a result of the continued absence of an agreement under PPS. The managers replied that their efforts to respond to the shop stewards' proposals on the grievance procedure had been "overtaken by events", and took the opportunity to complain that some workers were leaving "the job on the floor" as a first resort. This could not have happened on many occasions as both sides subsequently accepted that there were only 50 disputed times out of the 8000 measured thus far.** Nonetheless, it was one tentative sign that some former pieceworkers were beginning to adopt the industrial tactics of their counterparts in other, more militant plants in Coventry.

A few weeks later talks over the maintenance electricians' separate productivity scheme became snarled up in arguments about the role of section stewards in the procedure for disputing measured times. But almost as soon as collective bargaining had returned to these familiar topics, works management broke the news of a fresh redundancy crisis. As a result of a further decline in orders, they explained, there would be another round

of job-cuts within the Group. The Sanvey Gata plant at Leicester was to be closed down with the loss of some 180 hourly-rated jobs. Though this work was to be transferred to Edgwick 79 redundancies (including 55 hourly-rated jobs) would take place at that plant, followed by a brief period of short-time working.¹⁰⁰ As before, the senior stewards were invited to find volunteers. On this occasion, they were told individual notices would be issued at the end of the week.

Apparently, there was no resistance to this second programme of cuts. The minutes only recorded the JSSC's decision not to convene a works meeting on the issue. The deadline for the notices passed without a mention.

The demise of PPS

By April 1971, there were clear signs that the senior stewards had reached the limit of their patience over the slow progress of PPS. On 5 April, the EC decided to recommend to the JSSC that all measured times which did not produce 100% performance should be disputed, and that if management could not tackle these grievances efficiently then they should be asked to devise "an alternate pay system". Three days later the senior stewards accused management of avoiding agreement on "mutuality" and deliberately protracting work on measured times so that it could

continue to pay on estimated times. Notice was given that the JSSC would reject "PPS and all related matters" if there was no improvement by October.

Towards the end of the month, John David, a newly-appointed director of Herbert-BSA (and one of Raine's closest friends and a former colleague at Associated Engineering)²⁰¹ tried to re-assure the stewards that, though PPS seemed to have "lost its way a bit", senior management was still committed to the scheme. He told them that PE consultants had been drafted in to see if there was some way measured job-times could be established more quickly.²⁰² If this news did not mark the end of HPL's involvement in Herbert's affairs, it certainly foreshadowed it. With the patronage of an erstwhile colleague who was now Herbert's Chief Executive, PE became increasingly involved in the repair work on Edgwick's productivity scheme. This meant that even if the senior managers genuinely wanted to introduce measured daywork - and there was little likelihood of that given the imminence of short-time working - they intended to do so without carrying HPL's corporatist baggage. Nevertheless, it is probably apt that this detail was given no special significance at that time by the senior stewards. They were more concerned with the continuing effects of Raine's "desperate exercise in sheer survival". On 16 April, management gave notice of short-time working for 580 hourly-rated workers at Edgwick and, on 3 May, details were given on further manpower cuts within the Group.

However, even at this late stage the senior stewards seemed reluctant to abandon PPS. After their meeting with John David, on 23 April, they decided to give the company a month to improve some features of the scheme; but when management submitted entirely new proposals on the disputes procedure two weeks later, the EC decided to "go into procedure".

The Works Conference took place on 24 June. The AEF official, Butler, recited the dismal facts: the average pay for a skilled pieceworker at Edgwick was now nearly £4 below the district average (£36.13 compared to £40); only 8000 of some 200,000 jobs had been measured so far; and the scheme still remained without an agreed disputes procedure. In reply, management admitted the initial plan to introduce measured daywork after six months of ETPS had been "unrealistic"; but now a new consultancy service, PE, were looking into the matter and Harbert's own productivity services was being de-centralised. The unions' claim for a "compensatory payment" for the failure of the productivity scheme and "mutuality" in the disputes procedure were both rejected. When the Local Conference was held nearly two months later, on 17 August, the debate seemed almost ritualistic. Butler talked about "spurring" the Company on to improving the scheme; but nothing in the minutes suggests that anyone had any fresh ideas on the subject. This apparent indifference was hardly surprising since events between the two conferences could only have confirmed the view that, for both sides, PPS had become totally irrelevant.

On 5 July 1971, divisional management had warned the shop stewards that a continuing decline in orders made more redundancies likely. A month later, and only seven days before the Local Conference, the senior stewards were asked to find volunteers within "certain broad areas".

Negotiations on the "challenge procedure" had made no further progress. On 7 July, management had tabled another draft of their "challenge procedure" which was promptly rejected because it made no mention of the shop steward's role in disputed times. It was a rather basic omission which must have discouraged the senior stewards. However, when works management complained that, without using (the notorious) synthetics, it would take five months to complete a time study of the assembly of such new machines as the 5 Auto, the stewards exploited this situation by offering an agreement on synthetics if management accepted their demand for "mutuality".¹⁰² In their turn, the managers must have imagined similar wrangles over other new designs and the work being transferred from Wigton.

On 7 July, the managing director told the EC about plans to re-organise Edgwick's shopfloor into "cellular units". Dismayed by the falling pay performances - it was claimed that over a third of the gangs had failed to reach 85% of their target earnings - the senior stewards must have been concerned that the introduction of "cell production" would result in serious

disruptions of production and so lead to a further decline in pay bonuses.

Further evidence of the irrelevance of PPS came only two days after the Local Conference when, on 19 August, management announced plans for a further 100 redundancies. On this occasion, the shop stewards had no difficulties in finding volunteers - the JSSC reported 153, although not enough were acceptable to management - whose numbers were probably encouraged by short-time working, the overtime ban and the declining pay bonuses. The senior stewards, therefore, could hardly have been surprised with the form of management's initial pay offer for 1971/72, namely: £1 on the basic rates (pending the outcome of the national pay talks); and the formation of a joint working party to carry out a wide-ranging review of pay and conditions which included the possibility of scrapping the productivity scheme in March 1972.¹⁰⁰ As if intent on underlining the message about the proposed abandonment of PPS, the managers offered a safety net of the shop average plus 6% or 9%, whichever was the highest, to protect the £1 increase.¹⁰¹

PPS R.I.P.

PPS was dead and with it management's promise of raising pay at Herbert's to the district average. In the post-Fairfield, post-Donovan era, the shop stewards were asked to accommodate

themselves to a new economic reality: "any extra on the wages bill could bring about further redundancies", they were told.¹⁰⁶ The JSSC's claim for £5 on the base rate and 100% pay performance until March 1972 was dismissed as hopelessly unrealistic in a world where jobs were balanced against pay rises measured in pennies: "if (the) £1 (rise) went to £1.50", the stewards were advised, it "would mean (more) redundancies".¹⁰⁷ In the succeeding years, it was to become a familiar precept. Eventually, on 8 December, the pay talks were finally settled when a works meeting accepted an offer of £2 on the base rates of skilled pieceworkers (pro rata for the others) with a performance "safety net" of 94%. The minutes suggest that management wasted no time in demonstrating the equation between pay and jobs, for the same works meeting was asked to support the stewards' demand for more time and higher ex-gratia payments to deal with the imminent closures of both the Light Engineering Department and the "factory".

Even without the aid of the minutes, it is not difficult to imagine the negative impact these events had on the stewards' organisation at Edgwick. At any plant, the sudden collapse of a strike followed by a succession of redundancies (and more threatened) would be expected to generate the same effects: the vicious circle of a declining morale among both section stewards and membership which then posed serious difficulties for the senior stewards to convince management that the organisation remained capable of imposing and maintaining any form of

sanctions - especially those that directly affected members' earnings - which, in return, reduced morale even further. The minutes provide the outward signs of this pattern: the declining attendance at JSSC meetings; the EC's recorded "disappointment and dissatisfaction" with sections which ignored the overtime ban; the rush of managerial initiatives which, seemingly, encountered little resistance on the shopfloor though there was little, if any, prior consultation with the stewards (such as the introduction of new techniques in the paint shop, the closure of other departments, and the transfer of work between sections).

However, the minute books also provide evidence to suggest that this deterioration in shopfloor morale was not all to management's benefit. For example, on one occasion there were complaints of persistent lateness in the grinding section;¹⁰⁰ and, at another time, when management suggested an investigation into the falling productivity of the turning sections, Rollaston observed: "this is an overall sickness; you want an overall cure, not investigations in isolated cases".¹⁰¹

A moral opposition

The same records also provide evidence of a continuing resistance to the redundancies. On the shopfloor, the overtime ban was continued and, even if not observed by all sections, did inconvenience management at times;¹⁰² and the threat of "non

co-operation", especially with the paperwork for CLASS, frequently persuaded management to re-consider tactics on such matters as the transferral of potentially redundant staff and changes in work practices. One former Herbart employee, a DATA representative who left the Company during this period, has argued that the source of this residual power came from workers' moral objection to compulsory redundancies:

*"They did sustain the sanctions, I mean, the overtime ban stayed on. That was important in terms of winning the (struggle over) subsequent redundancies...They accepted the union's position perhaps on moral grounds. It reflects the nature of the people who worked there, part of the paternalism, the acceptance that they had responsibilities to other people who worked there...In a sense that moral argument is a legitimate part of trade unionism. They (had) that concept of class solidarity."****

I would suggest that in addition to sustaining some form of resistance on the shopfloor, this moral opposition provided the base for Doughty's efforts to continue resistance at another level. The minutes offer glimpses of Doughty's attempts to politicise the issue of redundancies by making it a subject for state intervention. In July, when works management intimated more redundancies were imminent, the JSSC decided to lobby the local MPs on "the machine tool situation". After the summer break, the senior stewards asked management if Maurice Edelman MP could be allowed to meet the JSSC during company time to:

*"discuss the deplorable state of the (machine tool) industry and try to develop some political pressure."*¹¹³

Lastly, two months later, Richard Moss, the Group Personnel Director was asked for financial assistance to send all shop stewards in the Group, some 120 workers, on the TUC's National Lobby on Unemployment on 24 November.

Dick Scroop, the DATA representative quoted above, linked his former colleagues' opposition to compulsory redundancies to "that concept of class solidarity". However, the minutes indicate that, at this extra-factory level, political opposition was not based on any class concept. Instead it had much closer associations with notions of employer paternalism (which Dick himself mentioned) and a classless, corporate society. This is why I find it significant that the stewards invited management to attend the parliamentary lobby against unemployment (though the minutes indicate that the stewards excluded some from their kind of corporatism: when the stewards said an MP wanted to address the JSSC and the managers suggested a tripartite meeting with the senior executives, including Raine, the offer was rejected). Corporatist or not, Doughty's efforts to politicise the "machine tool situation" failed to spur any kind of state intervention. It was not an occasion when Tory government ministers were prepared to consider rescuing "Jame ducks", such as Herbert's, from the vicissitudes of the world market.¹¹⁴

The failure of this last desperate bid probably deepened the

sense of hopelessness among some of the shop stewards. If so, Jim Rollaston, the JS8C's secretary during this period, must surely have been among them. During those final months of 1971, his minutes were full of omissions and comparatively terse. His very last entry for that year was pencilled in and decorated with doodles.*** Shortly afterwards, he refused to stand for re-election at the AGM and did not resume the secretary's post until March 1973. It may be a coincidence that the minutes for that same period, December 1971 to March 1973, are unavailable; but, compared to those first, heady days of the productivity scheme, it was a 'dark age' for Edgwick's JS8C.

Conclusions

Reconstructing events largely through the use of the stewards' records, this chapter has detailed how, within the span of four years - 1968 to 1972 - management attempted a major challenge 'from above' to the character of workplace politics at Edgwick in an abortive effort to raise productivity and gain more direct control over production. That 'challenge' brought about some important changes, in particular, the end of the gang system and the replacement of the 'hard gaffers' approach to labour management with a highly formalized collective bargaining system that was dismissed by some critics (among the 'old' managers) as

"fraternisation" with the unions. Paradoxically, the limitations of that challenge were demonstrated in the difficulties encountered by the senior stewards.

In detailing the stewards' response to these reforms, this chapter has shown that they were broadly welcomed, even though they encouraged, initially, an unprecedented level of sectional activity which tested the leadership's authority. The inauguration of a new company-based corporatism, modelled on the Fairfields' "experiment", was quickly followed by a doubling in the number of section stewards on the shopfloor. The senior stewards' enthusiasm for PPS persisted even when the scheme failed to prevent a relative decline in pay - let alone raise it to the district average - both because they enjoyed their new roles within what had suddenly become a highly centralised and formalised collective bargaining system and because they were conscious of the continued frailty of their organisation. That frailty was cruelly demonstrated when corporate management announced a major programme of redundancies. The stewards' inability to organise any serious opposition to the cuts, and the subsequent rebuttal of appeals for state aid, was quickly followed by a collapse of morale and the gradual eclipse of the organisation as a political force on the shopfloor. The absence of any minutes for the period from December 1971 to March 1973 was, in itself, a silent testimony to the profundity of the stewards' crisis.

It is also at this point that this work concludes its detailed narrative of workplace politics at Edgwick. The next chapter will only attempt a brief, selective account of events that linked the aftermath of the redundancy crisis with the plant's closure in 1983. This is not because events during that final decade were insignificant - that cannot be said of episodes such the "participation period" during the mid-1970s - but because they add little to the main argument that has been developed here and in the earlier chapters.

Chapter Eight: Endnotes and References

1. Income Data Services, "Focus 1", IDS (May 1976), p. 7.
2. Alfred Herbert Limited, Report and Accounts, 1968, p. 3.
3. Herbert JSSC Secretary's log, minute dated 22 August 1968.
4. Roger Williams, Payments-By-Results Reference Case Study No. 6, paper commissioned by the National Board for Prices and Incomes, January 1969, p. 10.
5. Herbert JSSC Secretary's log, minute dated 4 May 1968.
6. Herbert JSSC, Convenor's Log, note of talks on 10 July 1968.
7. Ibid.
8. Herbert JSSC Secretary's log, minute dated 17 August 1968.
9. Ibid.. The weekly levy for the *Fighting Fund* was 10/- for skilled workers, 7/6d for the semi-skilled, and 5/6d for labourers.
10. Herbert JSSC Secretary's log, minutes dated 22 August 1968.
11. Herbert JSSC, minute of meeting held on 12 August 1968.
12. S. Paulden and W. Hawkins, *Whatever Happened at Fairfield?* (London: Gower, 1969), p. 199.
13. Herbert JSSC, minute of meeting held on 9 September 1968.
14. Ibid., 11 September 1968.
15. Herbert JSSC Secretary's log, minute dated 5 September 1968.
16. Ibid., 19 September 1968.

17. Ibid., 25 September 1968.
18. Ibid.
19. K.J.W. Alexander and C.L. Jenkins, *Fairfields* (London: Allen Lane, 1970), pp. 187-8.
20. Alexander and Jenkins, *Fairfields*; Paulden and Hawkins, *Whatever Happened at Fairfields?*
21. Houston's efforts in promoting the Fairfields reforms are mentioned in Paulden and Hawkins, *Whatever Happened at Fairfields?*, pp. 162-3.
22. Ibid., p. 95.
23. By March 1969, the J88C had a membership of 62 stewards. See Herbert J88C Secretary's log, minute dated 23 March 1969.
24. Ron Doughty, interview.
25. Herbert J88C Secretary's log, minute dated 15 November 1968.
26. Ibid., 22 December 1968.
27. Ibid., 28 February 1969.
28. Ibid., 5 May 1969.
29. Ibid., 18 June 1969.
30. Paulden and Hawkins, *Whatever Happened*, pp. 113-5.
31. Ibid., p. 118.
32. Ibid., p. 115.
33. Hugh Sephton, former main board director, interviewed on 8 June 1981.
34. Ibid., 29 May 1969.
35. Ibid., 15 August 1969.

36. Ibid., 20 August 1969.
37. Dick Scroop, formerly a technical worker in the New Projects Department, interviewed on 7 July 1982.
38. Herbert JSSC Secretary's log, minute dated 4 February 1969.
39. See interviews with Ron Doughty and Sid Birch.
40. The remarks of a shop manager, noted by the JSSC's Secretary at a meeting held on 11 June 1969.
41. Ibid., 20 June 1969.
42. Ibid., 23 June 1969.
43. Ibid., 24 June 1969.
44. Ibid., 23 January 1969.
45. Richard Young, interviewed on 9 August 1982.
46. Herbert JSSC Secretary's log, minute dated 30 June 1969.
47. Ibid., 20 October, 21 November, 3 December 1969.
48. Ibid., 18 September 1969.
49. Ibid., 19 September 1969.
50. Ibid., 14 March 1969.
51. Ibid.
52. Ibid., 6 October 1969.
53. Ibid., 30 September 1969.
54. Ibid., 2 October 1969.
55. Ibid., 16 September 1969.
56. Ibid., 22 October 1969.
57. Ibid., 26 November 1969.
58. Ibid., 22 October 1969.
59. Ron Doughty, interview.
60. Herbert JSSC, minute dated 25 October 1969.

61. As a result of those efforts, trade union delegates from the four local plants within the Herbert Group - Lutterworth, Exhall, Red Lane and Edgwick - met at the AEU district offices on 26 November to exchange news and ideas on group management's push towards measured daywork. Though their pledge to form a combine committee was not realised until months later, important contacts were established between workplace-based trade union organisations within the Group.
62. Minutes of the meeting at the AEU offices make it clear that the other local plants were at earlier stages of similar productivity deals.
63. Herbert JSSC Secretary's log, minute dated 4 November 1969.
64. Ibid., 16 December 1969.
65. Ibid., 24 March 1970.
66. Ibid., 13 February 1970.
67. Ibid., 19, 24 November 1969.
68. Ibid., 7 January 1970.
69. Ibid., 8 January 1970.
70. Ibid., 9 March 1970.
71. Ibid., 13 March 1970.
72. Ibid., 19, 20 January 1970.
73. Ibid., 8 December 1971.
74. Ibid., 8 July 1970.
75. Ibid., 8 June 1970.
76. Ibid., 1 September 1970.
77. Ibid., 20 October 1970.

78. Throughout the PPS period, that drift continued unabated.
At a works conference on 9 December 1970, management stated there had been a net loss of 84 indirect workers in 1969-70; Herbert JSSC, minute dated 9 December 1970.
79. Herbert JSSC Secretary's log, minute dated 28 August 1970.
80. Ibid., 16 December 1970.
81. Ibid., 17 September 1970.
82. Ibid., 30 September 1970.
83. Ibid., 27 November 1970.
84. Ibid., 6 January 1970.
85. Even here some grievancies illuminated tiny features of Herbert's crisis, such as the occasion when the millers complained that the scale of the recruitment of trainees onto their section threatened their skilled status. See Herbert JSSC Secretary's log, minute dated 1 January 1970.
86. "Alfred Herbert: Survival Before Profits", *Sunday Times*, 30 April 1972.
87. Patrick O'Brien, interviewed on 16 September 1981.
88. *Sunday Times*, 30 April 1972.
89. Ron Doughty, interview.
90. Herbert JSSC Secretary's log, minute dated 8 February 1971.
91. Ibid., 12 February 1971.
92. Ibid., 5 February 1971.
93. Ibid., 17 February 1971.
94. Ibid., 18 February 1971.
95. Ibid., 5 February 1971.
96. Ibid., 12 February 1971.

- 97. Ibid., 2, 4 March 1971.
- 98. Ibid., 10 March 1971.
- 99. Ibid., 31 March 1971.
- 100. Ibid., 29 March 1971.
- 101. Patrick O'Brien, interview.
- 102. Herbert JSSC Secretary's log, minute dated 23 April 1971.
- 103. Ibid., 8 July, 4 August 1971.
- 104. Ibid., 28 September 1971.
- 105. Ibid., 7 October 1971.
- 106. Ibid., 13 October 1971.
- 107. Ibid., 20 October 1971.
- 108. Ibid., 1 November 1971.
- 109. Ibid., 25 October 1971.
- 110. Ibid., 7 October 1971.
- 111. Dick Scroop, interview.
- 112. Herbert JSSC Secretary's log, minute dated 9 September 1971.
- 113. "Mr Davies to Meet Herbert Men", *Financial Times*, 13 March 1972.
- 114. Herbert JSSC Secretary's log, minute dated 15 December 1971.

CHAPTER NINE: A DECADE OF CRISES

Introduction

This chapter provides a selective narrative that attempts to link the events surrounding the demise of the productivity scheme with Herbert's last days as the subsidiary of a small re-conditioning firm. Its aim is to do no more than highlight some of the continuities and changes in workplace politics during that final decade. In doing so, it will touch on a number of themes: the continued weak but centralised character of the shop stewards' organisation; the impact of state intervention on shopfloor morale; and the strength of a factory-based corporatism in the stewards' politics.

Coming Out of Despair

Rollaston did not resume office, as secretary, until 1973. His entries from March 1973 confirm that Herbert's difficulties were only eased by a temporary recovery in the market, and that by the end of that year, the corporate malaise had returned in full measure. Unlike in previous years, however, the renewal of Herbert's managerial crisis was not reflected in the general mood among the shop stewards or, more precisely, among the senior stewards. On the contrary, Rollaston's minutes suggest that,

particularly during 1974, they grew in confidence as the company's demise seemed more certain. The explanation to this paradox is that in the months leading up to Herbert's bankruptcy, the senior stewards had firm hopes of a government 'rescue'. By May 1974, the state-funded Finance Corporation for Industry had already loaned Herbert's £6m which suggested the government had some stake in the company's survival. In June the senior stewards felt further encouraged after they had lobbied the new Secretary of State at the Department of Industry, Anthony Wedgwood Benn. He had responded to their appeal for more money by asking them how they would spend the additional state aid to restore the company. Benn made it clear that funds would be provided if the managers approached him for assistance, and that when that happened he would insist on the stewards' involvement in determining Herbert's survival.¹

In the event, the managers did approach the Minister for more funds and, as promised, Benn responded by offering aid on condition that the company 'opened its books' and involved its employees in the formulation of "a new corporate plan". Raine appeared enthusiastic at the prospect of Herbert's becoming, as one business journalist put it, "the test bed for Mr. Benn's pet theories on democracy and worker participation". He assured a gathering of government officials, trade unionists and managers that "there will be no holds barred with disclosure" and described the proposals as "one hell of a social experiment".

Mr Benn's 'Experiment in Industrial Democracy'

During what became known as the 'participation period', the managers did talk candidly about the policies and practices that had helped to bring Herbert's to the brink of bankruptcy. During the next six months, they provided more than enough evidence to confirm the stewards' long-standing belief that the crisis was due primarily to managerial incompetence. But the process of "worker participation" was given much less substance. Though each site had a joint committee of managers and workers' representatives (all of whom were shop and staff stewards) which reported up to a "group committee" (that included a senior official from the DI), "worker participation" was severely limited in two ways. First, all but one representative, a TASS member, agreed to restrict the flow of information from the committees to the membership because of an ascribed commercial 'sensitivity' of much of the data.² Second, only workers in one union, TASS again, tried to formulate their own plans for the company's survival;³ the others seemed content to limit their "participation" to criticising the plans devised by others: the managers and government's auditors.

I would argue that, from the stewards' perspective, these were critical weaknesses which reinforced established features of their plant organisation. Since the "corporate plan" which finally emerged was largely devised over the heads of the vast

majority of the membership, they were unlikely to feel any sense of ownership towards it and be prepared to make great sacrifices to defend the "plan" if, or when, necessary. On the contrary, their very passivity almost guaranteed that they would react to any such threats with a hopeless fatalism. Those threats quickly materialised.

In May 1975, the same month when the "corporate plan" was presented to the DI, the Department appointed John Buckley as non-executive Chairman of the Board. The decision was interpreted as a move to "re-assure those in industry worried about Mr. Benn's intentions for those companies which have to seek government support." Buckley, it was noted, had gained his reputation from the re-organisation of the Davy Ashmore group." In August, Benn was transferred to the Department of Energy and his successor, Eric Varley, acted quickly. On 8 August, Raine was obliged to make a "surprise resignation" and Walter Lees was appointed the following day. The background of this new appointee would also have re-assured 'worried' industrialists. Formerly MD of Tube Investment's Machine Tool Division, Lees was the chief architect of the rationalisation of the Division's Charles Churchill companies, a programme of redundancies that encountered spirited opposition from some unions." In an interview with "Sunday Times" journalists published two days after his appointment, Herbert's new Chief Executive signalled his intention to scrap the "corporate plan": "when he talks about (cutting) overheads", the article reported, "he means the wages bill. The labour force (for

the Group) is down to 6,750...(but he) still needs to cut by approximately 1,500."

When, in October, Lees began to implement his plans by announcing 550 compulsory redundancies at Edgwick (and the imminence of 700 more cuts at the Red Lane plant), the shop stewards responded with a call for strike action.²⁰ That week, the front page of *Socialist Worker* carried the story of the workers' "no redundancies" pledge; but, before that edition was out, the senior stewards had accepted a programme of voluntary redundancies and called off the strike.²¹ Predictably, they then approached Varley for help.²² Unfortunately, his response was also predictable. Varley made it clear that he had no intention of "interfering" with the 'day-to-day' management of the company even though it was on the eve of becoming the state-owned National Enterprise Board's first subsidiary.²³

This cycle of events was repeated in 1976, 1977 and 1978. Each time, management presented the redundancies as part of a desperate remedy. Each time, the senior stewards protested against the cuts and sought the intervention of MPs, government officials and the NEB Chairman. Each time, they were rebuffed with the argument that management must be allowed to manage, and each time the crisis was resolved by the discovery of a sufficient number of volunteers. Though the rationale for the cuts changed during those years - first, it was a question of reducing "overheads"; later, it was also as a consequence of

Herbert's necessary move into capital-intensive products¹⁴ - the experience of the redundancies was no different and nor was the response of the workplace organisation. The section stewards became increasingly fatalistic while the convenor put more and more energy into an extra-plant organisation that was involved in a national lobby for import controls - the Coventry Machine Tool Committee.

In 1979, overseen by a hostile Conservative Government, the NEB decided to cease funding its "remaining unsolved problem company".¹⁵ At that time Herbert's was about to launch a new range of CMC lathes; but, on the basis of its own consultants' assessment of prospects in the high technology turning machine market, it was decided that additional funds would not be provided to see through the re-organisation.¹⁶

Catch-22: The Difficulties of Resistance in a 'Problem Company'

From the moment the new Conservative Government took office in February 1979 the senior stewards knew the NEB was likely to abandon Herbert's. Ten months later this dismal prophecy was fulfilled when the company's main board announced details of a rationalisation programme which was made, as the *Financial Times* put it, "in the knowledge that the National Enterprise Board will not provide any more money."¹⁷

News of the redundancies came at a crucial time in the annual pay talks at Edgwick. The pay date was less than a month away; but in November the managers had made it clear that, because of "cash-flow" problems, they wanted a pay freeze until April 1980 followed by a 5% rise for the remainder of the year. The senior stewards considered some form of industrial action to press their claim for 20%; but as they expected another round of redundancies in the New Year - as a result of changes in machine tool design and market competition, as well as cash-flow difficulties - they felt trapped in a 'catch-22' situation: if they continued negotiations until the spring they would lose the membership's support for any kind of industrial action; but if they rejected the offer and imposed sanctions, management would be provided with a ready-made excuse for more redundancies. Ironically, news of the NEB's decision resolved their dilemma. With the company rapidly approaching bankruptcy for the second time in five years - this time without a government prepared to make a 'rescue bid' - there was no hope of forcing a quick settlement through industrial action. (Indeed, at least one senior steward held the opinion that the membership should "accept some of the burden" of management's difficulties.) So they decided to "go into procedure".¹⁰

As a veteran of Herbert's recurring crises, Ron Doughty seemed to take this new threat in his stride. He anticipated management's next move - the quick sale of the company's more profitable

subsidiaries - and soon began exploring the potential for parliamentary lobbies. As a collective, however, the EC was bereft of ideas. As one of them put it: "We've got nothing to do but wait." The news of the NEB's decision seemed to create a sense of shock among the section stewards to judge from their silence when the convenor reported back on the initial meeting with senior management.¹²

While the news undoubtedly created a sense of shock, it also seemed to heal the divisions among the membership over the senior stewards' handling of the Confed dispute during the previous summer. For months after the event a large section of the membership had felt aggrieved about being 'instructed' by their senior stewards to strike in support of the Confed's claim for a shorter working week. There was interminable speculation over likely resignations from the JSSC and the election of 'rebel' candidates, and even the convenor became anxious as his section delayed making their nominations until the very eve of the AGM. But when I returned to Edgwick at the beginning of January, I learnt that all but one of the stewards had been re-elected and, later, at the AGM itself, I witnessed the unopposed re-election of all the committee's officers and delegates.

Before the Personnel Director cut off my fieldwork I was able to attend one more EC meeting at the end of January. By that time it seemed that the senior stewards, particularly the convenor, appeared to be preparing for the redundancy talks by marshalling

information to support three arguments: as a profit centre Edgwick was being 'milked' by corporate management; it was suffering the additional burden of a production management that was thoroughly incompetent; and scarce funds were being mis-spent on 'luxury' items (such as the notorious curtains for the LED block).

Resistance from an unexpected quarter

On 29 January, management announced plans to sell off the profitable parts of the Group to maintain a reduced workforce at Edgwick. This was quickly followed by the announcement of compulsory redundancies for both staff and shopfloor workers at the plant. In reply, the stewards demanded higher severance pay and voluntary redundancies. A few weeks later, management followed through its plan by selecting what was probably considered one of the weakest areas of union organisation, the catalogue store, to issue the first notices. The response must have caused as much surprise as the packers' strike nearly twenty years before. When management tried to sack three workers, two eventually agreed to quit, but the third resisted and a combination of sabotage and more orthodox threats to 'black' the catalogues persuaded management to withdraw the notice and transfer him to another section."

This display of militancy by clerical workers surprised the EC as

much as the managers. Nevertheless they quickly tried to build on this partial success by convening a works meeting to secure approval for plant-wide strike action in the event of further attempts by management to implement compulsory redundancies. Management, in turn, responded quickly to this development by issuing on the eve of the works meeting, the names of those selected for redundancy. As anticipated, this tactic effectively split the membership and caused the majority to vote against strike action. When, a few weeks later, the senior stewards tried to reverse the decision at another works meeting, the no-strike vote actually increased.

Despite these set-backs, resistance continued at a sectional level.²¹ On 1 May the foundry workers went on strike for higher severance pay - and then returned to work when a district official negotiated a £500 supplement to the statutory minimum payment.²² Next day, staff walked out when two clerks were given one hour's notice of redundancy. A series of walk-outs continued for a week until two workers decided to volunteer for redundancy and management withdrew compulsory notices on three others. After this confrontation, management abandoned its tough stance and sought redundancies on a voluntary basis over the next two months.²³

By June, Edgwick and a spares section at Wilsons Lane were the sole remaining industrial sites of the Herbert 'empire'. The Tooling Division had been sold to Clarksons International; Numerical Control had gone to GEC; and Instruments purchased by a management consortium. The Machine Tools Division had all but disappeared in a series of purchases: the Lutterworth plant was acquired by DeVlieg; Mackadown Lane sold to White Consolidated; and Red Lane to Tooling Investments, a small, Midland-based firm. Efforts to sell Edgwick, however, repeatedly failed. Consequently, on 2 July, management announced the plant's closure and gave 90 days notice to the 1000 workers remaining at the site.

Ron readily admitted he had no idea how to win the struggle against closure; but he was more than willing to try. Indeed, his enthusiasm contrasted strongly with the passive, depressed mood of the EC. Soon after the news of the closure was released he spoke on local radio and publicly invited Sir Keith Joseph, the new Secretary of State for Trade and Industry, to visit Edgwick and see for himself the "world beaters" that were produced there. Subsequently, he approached the ITW with the idea of making a 30 minute film on Herbert's; contacted the local MPs to seek their aid both in lobbying Government and identifying a potential buyer for the site; urged colleagues in the Spares Department to write to Herbert's customers, appealing to them to lobby the Government on their behalf or help find a buyer;" and when the Workshop suggested he should consider drawing upon support from a wide

range of organisations, including Coventry City Council, he immediately telephoned the Leader of the Labour Group, Councillor Waugh and asked to meet the Mayor. Ron also used his local union branch to send a resolution to the AUEW Executive appealing to dockers to ban all machine tool imports for one week as a way of highlighting the industry's plight as well as Herbert's particular difficulties."

Some of these tactics, particularly the appeal to the dockers, suggest that it would be insufficient to describe the politics of Ron's campaign as pragmatic. There was, of course, a large element of pragmatism in his choice of options. Even if he had wanted to emulate the 'work-in' by shipyard workers at UCS, for example, or any other form of action that involved the broad participation of the membership, he could not ignore his own experience of workplace unionism at Herbert's or avoid a dispassionate assessment of the current situation at Edgwick: the low morale and near passivity of his senior stewards; his dependence on young stewards, mainly among staff workers, to carry through his ideas; the fatalism of many members who had experienced redundancy and re-employment at Herbert's twice or even three times in a decade;" and, last but certainly not least, the sectionalism of a membership which had already blocked several attempts to co-ordinate a factory-wide resistance to redundancies. But Ron's politics were not simply a pragmatic accommodation to a terrain hostile to more radical forms of resistance. From a very early stage in the crisis he seemed to

put aside his criticisms of 'managerial incompetence' and, instead, focused his anger on imports. I recall one conversation in which he talked of imports as the main threat to jobs throughout the manufacturing sector in British industry. He clearly believed import controls were desperately needed: "If you get mugged in a dark alley, you don't turn the other cheek.", he said. As will be seen, the demand for import controls was to feature prominently in the Herbert workers' first and last political demonstration.

A trade union enquiry

On 14 July, the Workshop was given the opportunity to put forward its own proposals to the EC on how to respond to the imminent closure of the site. A 'trade union enquiry' was advocated which, though more radical than anything the stewards had tried thus far, could also claim to be pragmatic in the sense that it, too, assumed the passivity of the vast majority of the membership at Edgwick. In essence, the proposal was to ask the City Council's Economic Unit to carry out a social audit of the costs of closure and draw upon resources at TURU, Ruskin College, to enquire into the background to Herbert's latest crisis and formulate an alternative plan for the site. Similar to our involvement in the preparations for the CHTC's national conference, we were offering the stewards a campaign by proxy. All the stewards had to do was grant us permission to set it up, and yet, for reasons we did not

understand at the time, they were not enthusiastic (though before making a final decision, they asked the Workshop to contact sympathetic academics and find out exactly what help they could provide). Two days later, the situation became clearer when Ron telephoned to tell the Workshop he had decided to convene a meeting between the EC, the senior staff stewards and members of plant management to explore the possibility of forming a 'common front' to extract certain financial data from corporate management. The purpose of this information was unclear as Ron stated, on more than one occasion, that the latter body had put a viable plan to the NEB and, besides, he would not know where to start even if he had wanted to develop alternative proposals.

During the remainder of July, the Workshop continued to press Ron for a public enquiry. (This time it was suggested that it could be organised under the auspices of the City Council or Regional TUC.) Yet, it was obvious that Ron's chief hopes were that either a buyer would be found or the NEB persuaded to accept management's own scheme, even though the latest and "more restricted" proposals for Edgwick's survival entailed the loss of 800 jobs. It is in this context that Herbert's 'funeral procession' has to be considered.

Ritual and politics

On 6 August one hundred workers marched in procession behind

Herbert's 'coffin' from Hyde Park to the Department of Trade and Industry. Though it was a silent 'cortège', the posters and banners they carried protested at Edgwick's imminent closure. Some blamed Thatcher; most simply complained about "loyal" and "veteran" employees being suddenly "cast on the scrap heap"; but the banner that dominated the march portrayed a huge, grinning, yellow face looming over a gate below which the legend read: "Keep Him Out; Keep Herbert In".²⁷ At the Department Sir Keith was 'unavailable', so an official received both the 'coffin' and the stewards' petition. This requested an extension of the notices to allow time for the company to find a buyer and for the workers to put forward their own proposals, seeking, as the petition put it, "to utilise the intelligence of the shopfloor"; and an increase in severance pay above the statutory minimum.²⁸ Though these demands were modest, there was just the suggestion (or threat?) of a class-based 'campaign' to defend jobs if a buyer could not be found.

The demonstration also conveyed more than one message. For its organisers, its main purpose was to support the parliamentary lobby by protesting, in a thoroughly responsible manner, workers' just grievances at their undeserved fate. That is why the number of demonstrators was restricted, and offers of deputations from other local factories politely refused. This message of supplication was reinforced by those posters which testified to the "loyal service" of Herbert's "veteran" workers. However, the event had another message about the conflict between capital and

labour. There was, afterall, something irreverant, something mildly shocking about using the ritual of a funeral procession to stage a political demonstration. That is why the plant managers were instructed to find and snatch the 'coffin' before the day of the demonstration. For the workers who kept it safely hidden until that moment, class conflict was played out in a ritual into a game of 'hide and seek'. This message of protest and under-class rebellion was underlined by the smaller number of anti-Thatcher posters. There was also a third message which, in itself, was politically ambiguous: the demand for import controls. Simultaneously, it spoke of the stewards' attempts to find common cause with their employers and of their opposition to the corporate strategies once promoted by the TUC and Labour ministers. These contradictions may have suggested a potential for more radical politics;* but it was difficult to avoid the conclusion that this would not be realised in that particular struggle.

After the demonstration, the Workshop did not contact Ron again until mid-August when we learnt he had asked a benefits advice centre if they could calculate the total cost of social security payments if Edgwick closed. As this coincided with news that the City Council was organising a seminar on unemployment, we felt it was an opportune time to raise, once more, the idea of asking the City Council to carry out a social audit. Before contacting Ron, we approached two Labour councillors who agreed to put as a formal motion at the seminar the request that the Council,

through its Economic Unit, assess the full cost of Edgwick's closure. When we discussed these developments with Ron, he agreed to put the same request to the Council Leader. Two days later one of the councillors reported back. The proposal received no support at the 'seminar'; and when he mentioned the idea to the Council Leader, he had replied: "Good idea! Get the Workshop to do it."

This response provided yet another illustration of the 'Labourist fracture' discussed in chapter 5. The Labour Party had dominated Council politics for more than 20 years since the War; but the majority of Labour councillors saw no direct link between their work and the politics of the local engineering factories even though some of them had been, or were still, engineering workers. The reasons for this 'fracture' cannot be fully explored here. However, I would suggest that the Council Leader's dusty answer can be linked to the observation that the "dominant values within the local authority often seem to have been those of professional excellence rather than political choice. The (Coventry) City Council has in effect declared the end of ideology and developed instead a set of managerial values."³⁰ If the councillors held this classless, technocratic view of civic politics, then it follows that they would want to ensure the Council avoided participation in any situation, such as the crisis at Herbert's, where confrontation on a class basis could develop. From my own observations, it seems that the convenors shared the same view of municipal and class politics. For example, when they decided to

launch the Workshop's report at the Mayor's Parlour, drafting the Mayor's speech posed some difficulties. They agreed that he could not attack imports (since this contradicted the report's main findings) or refer to the Workshop's analysis of the crisis (as this identified employers as the 'villains of the piece'). Eventually, they decided that it would be better if he simply praised the CMTC for their efforts to save local jobs - without being too specific about the politics of the campaign. Though Ron Doughty was not present at that particular discussion, it is likely that he would have concurred with this outcome. It accorded with his most strongly held views about the campaign. Similarly, while Ron did not talk about his conversations with the Council's Labour Leader, I am sure he appreciated the councillor's reluctance to get involved, for they shared broadly similar views on the politics of local government. If my assumptions are correct then lobbying the City Council to actively support a class-based campaign to defend local jobs would have been ruled out, dismissed as 'impractical', in Ron's mind. It would also have been one more reason why he felt justified in clinging to the manager's 'rescue' plan (while hoping for the sudden appearance of a buyer). The outcome of the local authority seminar proved to be the final setback for the Workshop. By then it was late August and we felt that even if there was potential for a more radical kind of resistance, it was too late for it to succeed. From this point the Workshop turned its attention to the preparations for a national delegate conference of shop stewards in the machine tool industry

(mentioned in chapter one).

The 'sit-in'

One reason why we were attracted to the idea of a trade union enquiry was that through it we could investigate the suspicion, held by the senior staff stewards, that the plant managers intended to purchase all production rights on Edgwick's latest range of CMC lathes, the AL-76, and then transfer production to another, smaller site. This fitted in with the widely-held view that the fixed costs at Edgwick made unviable any plans for the annual production of 500 machines. The surplus production of components for the Husky and AL machines and the decision, as recently as July, to contract out work on the fitters' drawings for those machines were interpreted as indirect evidence in support of this theory.²¹ Initially, the EC gave it no credence; but as the closure date approached they re-considered matters.

Towards the end of August, a prospective buyer finally emerged: Tooling Investments, a small, private company that had already purchased the Red Lane site. As the total capital of this firm (including its new acquisition of the re-conditioning shops at Red Lane) were worth rather less than the assets held at Edgwick, the news only strengthened speculation that the plant would be shut down. To put pressure on management over the demand for higher severance pay, both shopfloor and office organisations

felt they had no option but impose a 'blockade' by boycotting all work that involved the movement of parts or machinery out of Edgwick. When, on 3 September (Day 63 of the 90-day notice) management suspended two staff workers without pay for observing the 'blockade', the stewards again felt impelled to take the next step - a sit-in.

The sit-in was not an occupation. Workers' wives or husbands did not approach the factory gates with sandwiches and thermos flasks. Instead, employees clocked in and clocked out and, in between, tried to find ways to kill time. Afterwards, some workers could recall moments of high drama when, for example, one staff worker decided to resume work and tried, unsuccessfully, to use the threat of physical violence to snatch some records for the managers.²³ There were also humorous incidents, such as the occasion when a 'loyal' worker watered plant containers which the 'rebels' were using to conceal company documents.²² Yet, for all the workers most of the time, the sit-in was a boring and depressing experience. A sense of defeatism took hold when management announced the new employer would only provide 500 jobs at Edgwick, for it seemed the aim of the sit-in was merely to raise severance pay for half of the current workforce. Predictably, the local press added to the agony by telling its readership that the stewards were jeopardising 500 jobs 'saved' by the new employer.²⁴

Under these circumstances it is not surprising that the 'sit-in'

quickly crumbled. A few days after one clerical worker tried to resume work at Wilsons Lane, several clerks at Edgwick succeeded in breaking 'sanctions'. Soon, they were followed by members in TASS and ABTMS. Nearly two weeks after the start of the sit-in, the stewards were forced to negotiate some kind of settlement. They managed to secure payment for the duration of the action and the 'promise' that 500 jobs would remain at Edgwick.

When they had concluded the deal with the 'old' employer, the stewards knew that, with very few exceptions, their names would be on the "roll of honour", as one worker called it. One senior steward avoided redundancy by quitting the union. A senior staff steward was advised to quit the union if he wanted a job; but, as the managers could not find a replacement prepared to work on his salary, they withdrew the threat.²⁶ The twist in the tail of this particular story was that, during the final days of the 90-day notice, the new employers transferred their 200 workers from the Red Lane site to Edgwick. This meant only 300 jobs were 'saved' at Edgwick and not 500 as promised.

New Herbert's: a Parody of the Old

After the 'sit-in' a few section stewards remained at Edgwick. Instead of merging with the shopfloor organisation brought to the plant by the Red Lane workers, they retained their own funds and

elected among themselves a new convenor. Thus a plant of 500 workers had the doubtful privilege of supporting two shopfloor organisations (one for new- and another for re-build). This could have been a serious error in other circumstances; but in the aftermath of the 'sit-in' it was of very little consequence. The most integrated organisation would probably have had little effect on the subsequent course of events.

At first, there was a general feeling of relief, that at last the company was in the hands of machine tool men and not a bunch of "outsiders" who were managing it on behalf of a state-run holding company. For a while, the new employers were even able to appeal to the *"Herbert Spirit"* by re-enacting the role of employer-paternalists. Soon after the takeover they granted a pay rise and at Christmas treated the workers and their families to a dinner-dance at the NEC. The stewards were told that there was really no need for a union as the firm had the workers' best interests at heart and would always give them the best deal.²⁶ However, these tokens of paternalism were not matched by the traditional hostility towards the unions. On the contrary, the new convenor (for 'new-build') was surprised to find a "co-operative management".²⁷ These gestures - combined with the wide recognition of the precarious state of the re-launched company - encouraged people to suspend some controls over such areas as: flexibility, recruitment of temporary workers, and overtime.

Within a year, the mood had changed. The flurry of activity to re-organise work - once regarded as a sign of the purposefulness of the new employers - was now re-interpreted as the familiar antics of a crisis-ridden management. The theme of 'managerial incompetence' returned to stewards' accounts of work.³⁸ Workplace politics soured as the employers' unpredictability and allegations of crooked dealings³⁹ made collective bargaining increasingly fraught and formerly compliant workers became "lazy bastards".⁴⁰ During the second year, the stewards increasingly felt they were living on borrowed time as they witnessed the rapid transformation of Herbert's new managers from self-appointed 'saviours' to asset-strippers.⁴¹ Twelve months later Tooling Investments brought Edgwick to its third, and ultimate, collapse.⁴²

Conclusions

Through a selective account of events, this chapter has brought the narrative of the Edgwick case study to its conclusion and, in doing so, pointed to the continuing limits of workplace organisation there. It also demonstrated how those limitations created a difficult terrain for the stewards and encouraged the leadership to keep within the established political horizons, though this effectively ruled out the possibility of organising any serious opposition to the steady attrition of jobs and the plant's eventual closure. The next chapter develops this argument

by considering the corporatist politics of the CMTC combine - a combine largely initiated, and organised by, Ron Doughty - and the reasons behind the Workshop's failure to persuade the convenors to adopt a socialist response to jobs crisis.

Chapter Nine: Endnotes and References

1. Ron Doughty, interview; "Stewards Meet Benn", *Morning Star*, 11 June 1974.
2. "Mr Benn is Given the Tools", *Observer*, 3 November 1974.
3. Mick Tew, interviewed in December 1978; Alfred Herbert Limited, minute of a meeting of the Edgwick Site Consultative Committee, held on 16 December 1974.
4. TASS, Herbert Limited, "1000 Plus Machines a Year", a paper presented to the Edgwick Site Consultative Committee on 10 February 1975.
5. "Davy Chief to Join A. Herbert Board", *Financial Times*, 16 May 1975.
6. Ibid.
7. Patrick O'Brien, interviewed on 31 July 1981.
8. Trade Union Studies Information Unit, *Machine Tool Report* (Newcastle: TUSIU, 1979), pp. 51-7.
9. "New Men to Wake Up Herbert", *Sunday Times*, 10 August 1975.
10. "Unions Say 'No Sacking'", *Coventry Evening Telegraph*, 10 October 1975.
11. Mick Tew, interview.
12. "'Buy City Plant' Herbert Unions Tell BBC", *Coventry Evening Telegraph*, 24 October 1975.
13. Audrey Wise, interviewed on 30 November 1979.
14. "Alfred Herbert to Sack 700", *Financial Times*, 5 July 1978.

15. National Enterprise Board, Annual Report and Accounts 1979, p. 4.
16. Geoffrey Foster, "Heirs of Alfred Herbert", *Management Today* (May 1982), p. 68.
17. "Herbert May Sell Part of the Group", *Financial Times*, 7 December 1979.
18. The account on the senior stewards' debate on tactics over the pay claim for 1980 is based on participant observation at EC meetings during the fieldwork.
19. Again, information here is based on participant observation.
20. Neil Rider, ACTSS steward, interviewed on 7 July 1980.
21. Ibid.
22. Ron Doughty, interviewed on 16 June 1981.
23. Neil Rider, interview.
24. Jane Smith, ACTSS member at the Wilsons' Lane site, interviewed on 19 May 1981.
25. Ron Doughty, interviewed on 11 July 1980.
26. Neil Rider, interview.
27. "Herbert Workers' Protest March", *Coventry Evening Telegraph*, 16 March 1980. See the accompanying photograph, as well as the article itself.
28. This account is based on participant observation. Representing Coventry Workshop, I was invited to attend the demonstration.
29. Peter Armstrong and Theo Nichols, *Workers Divided: A Study in Shopfloor Politics* (London: Fontana/Collins, 1976), p. 213.

30. John Benington, "Strategies for Change at the Local Level: Some Reflections", in *Community Work: One*, (eds.) David Jones and Majorie Mayo, (London: Routledge & Kegan Paul, 1974), p. 262.
31. Dave Parsons, senior TASS steward, interviewed on 9 July 1980.
32. Interviews with Neil Rider and Jane Smith.
33. Neil Rider, interview.
34. "Sit-in Workers Defy Threat", *Coventry Evening Telegraph*, 5 September 1980; "Herbert Spell Out the Grim Sit-in Choice", *Coventry Evening Telegraph*, 13 September 1980.
35. Neil Rider, interview.
36. Pete Russell, convenor for the 'new-build' workers, interviewed on 8 December 1980.
37. Ibid.
38. Ibid., 17 September 1981.
39. "Alfred Herbert R.I.P. (Rationalised, Ignored, Pillaged)", *Coventry Workshop* 40 (October-November 1983), p. 5; "Herberts Sheds 240", *Coventry Evening Telegraph*, 22 April 1983.
40. Pete Russell, interviewed on 17 September 1981.
41. Dave Parsons and Bob Paine (convenor for 're-build' workers), interviewed on a number of occasions between April and December 1982.
42. "The Drowning Man Goes Under Again - and this Time Takes the Lifeguard With Him", *Guardian*, 7 April 1983; "Drip-feed Aid for Herbert's is Out", *Coventry Evening Telegraph*, 28 May

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1983; "Death of a Factory", *Daily Mirror*, 14 October 1983.

CHAPTER TEN: THE FINAL IRONY

Introduction

This chapter moves beyond the strict confines of the case study to situate Edgwick in the project of the CMTC combine. It looks at the senior stewards' attempts at the three local plants - Herbert's, Wickman's and Webster & Bennett - to defend jobs through a campaign for import controls in order to (a) elaborate on the theme of corporatism in the stewards' politics and ideology and (b) consider some of the critical weaknesses in the Workshop's approach to shopfloor unionism. In terms of the narrative of this work, this means returning to that point where the Workshop was simultaneously involved in promoting a 'trade union enquiry' into the threatened closure of Edgwick and pressing the CMTC to organise a national conference of shop stewards in the machine tool industry. However, the story of the immediate outcome of that conference and the combine's eventual demise are detailed in Appendix 1 which also provides summary background notes on the shopfloor organisations at Wickman's and at Webster & Bennett. This chapter assumes that narrative to address two questions raised in the introductory chapter. Why did the Workshop fail to engage the convenors in a genuine dialogue? And why did they persist with a campaign for import controls long after they had apparently accepted the Workshop had, as Ron Doughty put it, "reversed cause and effect" by showing the rise

in imports to be the product of earlier redundancies.

The Final Irony

Before tackling these questions it is necessary to consider the political significance of the demand for import controls. The far left's critique of this demand asserted that: (a) it was 'corporatist' because it assumed, and tried to build on, a common identity of interests between labour, capital and the state; (b) in so doing, it set workers of one nation against those of another and strengthened racist ideas in the working class; and finally, (c) as a politically mis-conceived strategy - capitalists and the state were intent on pursuing other strategies - it dis-armed workers in the face of the employers' real offensive.³ The Workshop's perspective on the campaign demand was broadly similar but they noted two features that suggested the potential for a dialogue with the convenors, namely: (a) that the CMTC was an independent working class organisation (unlike some anti-import campaigns of the past, such as the textile industry's and the national media's 'Buy British' campaign); and (b) that the demand was politically ambiguous: from one perspective, it was implicitly corporatist; from another it also spoke of the conflict of classes. Import controls could be interpreted as an emphatic rejection of the national corporatism of the "industrial strategy", promoted jointly by the TUC and the Labour Government, in which stewards were asked to

work alongside employers and the state to make the industry more 'efficient', more 'competitive', by smoothing the way for changes in working practices and massive job losses.² In contrast, the demand for import controls suggested the shopfloor could be left untouched and the industry's crisis tackled exclusively at the level of trading relations between firms.

As if reflecting this political ambiguity, the Workshop found that the campaign was a 'broad church' which provided room for stewards who identified very closely with management (as in Alex Boyd's case) as well as those who held a class-conflict model of industry and were either critical (as in Ron Doughty's case) or suspicious (in Bert Kingham's) of management's actions. Not surprisingly, the dominant presence of the latter group of stewards encouraged the Workshop's hope that the campaign would eventually adopt explicitly socialist objectives. The Workshop was also encouraged when it found its analysis of the industry's job crisis was broadly acceptable to most members of the campaign committee. Indeed, a few stewards seemed to positively endorse our argument that the rise in imports was chiefly the product of a protracted process of rationalisation and dis-investment by the major employers. Why, then, did those same workers continue to lobby for import controls and ignore our socialist prescriptions? I would suggest that the most plausible explanation is that the stewards calculated that, while our class analysis resonated with their orientation towards shopfloor politics, the demand for selective import controls remained the most pragmatic strategy.

Corporatism: a pragmatic accomodation?

The spark for the campaign itself, the decision of senior stewards and convenors at several plants in the city to combine for the purpose of lobbying government, was implicitly based on a political judgement which said that it was patently 'impracticable' for even the most highly organised workforce to effectively resist a management that was determined to push through massive redundancies. At Edgwick and Banner Lane - plants where the shopfloor organisations had already been weakened by the effects of economic recession - the senior stewards had learnt to accomodate themselves to certain 'facts of life', namely: strike action was usually ineffectual in situations where workloads were very low (on the contrary, a stoppage could assist management); and that for reasons discussed earlier the dominant sections of the membership were, at best, ambivalent about resisting redundancies (in most cases, the threat to withdraw offers of severance pay was enough to bring recalcitrant stewards into line). In a situation where the stewards were unable to help themselves, the campaign could be seen as a plea for some kind of state 'rescue'.

Though the stewards never said so at the time, some may have differed with the Workshop's rather one-sided characterisation of state intervention in which successive governments were portrayed

as the agents of the industry's rationalisation and re-organisation. They may have considered it possible that, despite the validity of our observations (as far as they went), the Labour Government would 'rescue' jobs if it was persuaded that the political costs of inaction were too high. After all, the loans to Herbert's and then its 'nationalisation' under the NEB provided several of the key stewards in the campaign with first-hand experience of precisely that eventuality. Perhaps the calculation behind the anti-import campaign was that there was just a slight chance that it could work because it combined an appeal to British manufacturers' self-interest with the threat to government that further, massive redundancies in the Midlands could entail some political costs.

I would not suggest that all three convenors and their senior stewards had this pragmatic approach to politics, or even that any of the key actors were thoroughly pragmatic. The findings of the Herbert case study support those writings which stress the inconsistencies and contradictions of people's beliefs and attitudes.² However, such pragmatism does at least offer a rational explanation for the apparent contradiction between the stewards' broad acceptance of the Workshop's economic analysis and their rejection of our political prescriptions. For our alternative strategy was clearly 'impractical' both in its approach to the state and, more importantly, in its assessment of the political potential of the stewards' organisations.

Earlier I said that the Workshop's characterisation of state interventions was one-sided. We drew attention to those many acts which suggested government officials were concerned with finding ways of making firms more 'efficient', more 'competitive' in international markets; yet gave little account of those occasions when politicians and civil servants appeared to be prompted by concerns to avoid the political costs of a major redundancy. The accuracy of our assessment is debatable, but there can be no doubt that the strategy we drew from it was 'impractical' in the sense that it counselled the futility of negotiating with the only people in the state apparatus who had the power to change things. However, it was our assessment of the potential of workplace organisations that must have posed the greatest difficulties for the convenors and senior stewards (whether they pragmatically accepted the realities of the capitalist labour process or enthusiastically endorsed managerial strategies). For, instead of confirming their assessment of the vulnerability of workplace organisations during periods of economic down-turn, the Workshop asserted the primacy of factory-based organisation by urging the stewards to build working class power from the shopfloor and establish a national shop stewards' movement in the machine tool industry.

Also, the 'short term' aim of our alternative strategy - "to stop further job losses of any kind" - must have struck them as incredibly naive or mocked their hard won experience of factory politics. Either way it would have seriously damaged our

credibility as would-be political advocates if, in other ways, we had not already demonstrated our 'innocence'.

With the gift of hindsight, it is easy to see that we under-estimated the significance of the sectional character of the workplace organisation. We did not regard the shop stewards' committees at both Banner Lane and Edgwick as products of fragile coalitions in which those sections which were dominant were also the least likely to support what could be called a 'seige strategy' to defend jobs. Though we were aware of sectionalism, it was seen only as a 'problem', a threat to the stewards' organisation, instead of being, as Tony Lane put it, "inevitably produced by the nature of their practice; inevitably reproduced by the inability of that practice to be other than it was".⁴ This, in turn, led us to some misconceptions about the nature of steward leadership at the three plants as we became increasingly frustrated by the convenors' continuing delays in calling the 'national delegate conference' - agreed to in principle months before the Workshop had produced its research report to the CMTC.

Our involvement in the campaign gave us much concern about the relationship between the leadership and the members. To be more precise, we noted signs of oligarchic behaviour in all three convenors. Though sometimes accompanied by members of their organisation's 'inner cabinet', it was clear that on a wide range of issues concerning the campaign (and other matters not directly related to pay and conditions at the plant), the convenors were

empowered to take decisions without even consulting their colleagues. Sometimes, their comments were equally disturbing. For example, on one occasion when Bert allowed an outside speaker to address his committee on new technology, he later apologised for the limited debate that followed by saying: "90% of the stewards are too thick to understand". While observing all this (with some disapproval), we did not acknowledge the pressures of trade union activity on the shopfloor that made oligarchs of even the most politically conscious of the convenors. For broad, political theories counted for little in the daily routine of collective bargaining where the convenor learnt to value a stable bargaining relationship with management and take a jaundiced view of workers' efforts to shift the 'frontier of control'.* Pragmatism also taught the convenor how, in the interests of the organisation, it was necessary to learn 'the rules and rituals of the fix'* such as controlling the flow of information to the membership and, by drawing on his specialised skills as a negotiator, become adept at the 'put-down' to deal with the critic or rebel.*

In our discussions with the convenors we raised this delicate issue by pressing them to organise seminars and consider producing - with the Workshop's assistance - campaign news-sheets for the membership. This must have been regarded as another demonstration of the Workshop's industrial naivety. As Alex put it on one occasion when I pressed the matter rather too insistently: "You've a lot to learn about stewards". They were

never explicit on this question - on most occasions our proposals were simply turned aside or 'deferred' - but, given their circumstances, I would suggest that if they had offered an explanation in essence it would have been the same as that two national officials put to Tony Lane: political education is needlessly dangerous. 'Needless', because trade unionism is "a straightforward routine business" that does not prompt much reflection." 'Dangerous', because it raises the spectre of "creating a political consciousness amongst the active element of their membership who might eventually challenge them and their positions."*

As a general explanation, these comments are probably sufficient; but it should be noted that some convenors regarded political education as more 'needless' than did others, and some had cause to believe it to be more 'dangerous'. Bert's politics were firmly rooted in the pragmatism of trade union activity. In a world that was, as Woodcock put it, "as routine as peeling potatoes",¹⁰ there was little purpose for political education. For Alex, entangled in his senior manager's schemes for a practical industrial democracy' and the 'career development' of lay union officials, the proposal had much more sinister implications. Ron saw a link between his work as a convenor and his ideas on socialism, and his leadership was characterised by a more open, democratic debate than at the other two plants; but he made no efforts to challenge the political 'apathy' of his members.

Our 'naivety' must also have been evident in our persistent advocacy of the national delegate conference. For, unlike the convenors, we over-estimated the potential for 'parallel unionism' in an industry characterised by small factories and a labour force already much depleted by redundancies. This was the initial cause for our unwarranted enthusiasm. Later, many frustrating months later, we began to see the national conference as a means of escaping the limitations of work with the local convenors and finding a more radical constituency. In the summer of 1980, when the surviving members of the CMTC's executive finally yielded to the Workshop's persistency and allowed us to gauge the level of support for, and organise, a national delegate conference on their behalf, we were pleasantly surprised to discover shop stewards - in Colchester, Halifax, Sheffield and even in the smaller plants in Coventry - who seemed to share our politics but they had either been victimised in recent redundancies, or were about to suffer that experience, or belonged to workplace organisations too weakened and too small to send delegates to an 'unofficial' conference during 'company time'. We also discovered that the overwhelming majority of stewards in the industry (whether politically sympathetic or not) shared the same difficulties in organising trade union opposition to redundancies. As I mentioned earlier, after contacting 77 of the factories owned by the largest firms in the industry, we found only nine stewards' organisations prepared to send delegates. But perhaps even more importantly, we found the CMTC convenors indifferent to this situation. In part, their attitude

was based on a fierce jealousy of their campaign's independence from union officialdom (which led them to neglect calls for support - even at a district level where such aid would have been forthcoming). But their refusal to consider holding the conference on a weekend suggests that they were also concerned to demonstrate a certain autonomy from managerial control. I felt there was a kind of chauvinism in the way the convenors brusquely dismissed all suggestions aimed at broadening the campaign to smaller, weaker workplace organisations: "They're no use to us if they can't help themselves.", we were told. In a city with an unusual concentration of large engineering factories, this kind of big plant chauvinism should not have been unexpected but, for workers in the machine tool industry, it was a serious tactical error. It meant the CNTC could never be other than a very exclusive club for machine tool workers (and become even more exclusive as the recession deepened).

This inability to envisage a national movement that was anything other than an ad-hoc network of similarly 'autonomous' stewards' organisations fits with Beynon's observations on the "factory-based" consciousness of stewards in the car industry.²² The stewards in the CNTC combine could only see the campaign as a direct extension of their own experiences of workplace politics. Thus, chauvinistic or not, the three convenors really could not comprehend how stewards in small, fragile organisations scattered across the country could help in their struggle. The idea was too ridiculous to consider or, to be precise, it seemed so when the

Workshop propounded it. Somehow, for a while, Benn's rhetoric gave them pause for thought. For a few weeks, perhaps, we could sense that the hard-nosed pragmatists and 'practical industrial democrats' we had been working with for years really believed that the campaign could be revived through the call to 'prepare for power'. For some unknown reason, his depiction of a close, collaborative alliance between an industrial combine committee, union 'officialdom' and the Labour Party looked plausible. Perhaps it was his eloquence and his authority as an ex-government minister that caused the convenors to re-assess ideas they had long ago dismissed as 'impractical', the stuff of day-dreams and the talk of political activists outside the factory. This strange vision had not faded completely by the time the "steering committee" met at Sheffield. With a logic that violated all sense of pragmatism, the stewards agreed that the national combine should include representatives of the unemployed. But by then, some four months after Benn's speech, this decision was really no more than a sentimental nod to socialism since it was apparent that, despite all the talk, there would be no national combine of machine tool workers.

Another possible reason why the stewards found Benn's politics plausible is that by this time they recognised the bankruptcy of their own. It was noticeable that after Thatcher's electoral triumph, the convenors appeared to lose heart in their campaign. Though it was never discussed - at least, not at meetings where the Workshop was present - it is likely that the convenors

recognised the new Government would not be even slightly sympathetic to their politically suspect form of corporatism. The 'Iron Lady' had made it clear that she would not count the cost if her conviction in the freedom of the market resulted in thousands of redundancies - most certainly if the only ones appealing for selective import controls were a few stewards. Also, some months before the October conference, the demand became doubly irrelevant when Wickman's secured a deal to produce Japanese-designed machines. The effect of this agreement was to split the combine committee. While Alex still supported the demand for import controls - and, indeed, continued a one-man 'Buy British' campaign long afterwards - Bert and the other stewards at Banner Lane formed the opinion that their members' jobs depended on the continued flow of imports. At the Sheffield conference, when an unemployed worker tried to revive the demand, the stewards from TI Churchill voiced their opposition to import controls for the very same reason: their members' jobs also could be put at risk by such a policy. This dispute over imports was another demonstration of the stewards' "factory-based" consciousness, a consciousness that made the prospects for a national campaign - given the uneven development and diverse response of firms to the recession - extremely improbable.

It was perhaps the final irony of the stewards' campaign that when the convenors adopted the call for 'workers' control' (a moment the Workshop had worked so long and hard for) they used it as a pious resolution which both concealed the political

bankruptcy of their campaign and gave it a spirited ending. It was a resolution that echoed the conclusion to the 'sit-in' that had taken place at Herbert's Edgwick works just a few months earlier. After Fred Blackford, a staff steward and member of the draughtsmen's union for over 30 years made the concluding address, spontaneously people shook hands and sang a chorus of 'Auld Lang Syne'.

Conclusion

Briefly moving beyond the case study, this chapter has elaborated on the theme of corporatism in the stewards' politics and ideology by linking Herbert's with the CNTC's campaign for import controls, a campaign largely initiated and organised by Ron Doughty. It has also explored some of the critical weaknesses of the Workshop's approach to the combine and how they related to an over-optimistic appraisal of the radical potential of factory-based organisation in Britain's form of 'parallel unionism'. In its review of the main findings of the case study, the next chapter compares these arguments with the analyses offered in other studies of British shopfloor unionism.

Chapter Ten: End Notes and References

1. A particularly pertinent example of this position is provided in the writings of David Spence, member of Workers Fight, in his short-lived and Coventry-based newsheet, *Machine Tool Worker*.
2. Machine Tools Economic Development Council, "Industrial Strategy: Report by the Machine Tools EDC", mimeo, National Economic Development Office, November 1977; *idem*, "Machine Tools: Industrial Strategy", leaflet published by the National Economic Development Office, March 1978.
3. Kenneth Roberts, *The Working Class* (London, Longmans, 1978), pp. 151-5; Theo Nichols and Peter Armstrong, *Workers Divided* (London: Fontana, 1976), pp. 128, 150-2, 200-3, 212-4.
4. Tony Lane, *The Union Makes Us Strong* (London: Arrow Books, 1974), p. 268.
5. Brown, *Piecework Bargaining*, p. 149.
6. Lane, *The Union Makes Us Strong*, p. 269.
7. *Ibid.*, p. 255.
8. *Ibid.*, p. 260.
9. *Ibid.*
10. *Ibid.*
11. Huw Beynon, *Working For Ford* (Wakefield: W.P. Publishing, 1978) reprint, pp 228-9, 230.

CHAPTER ELEVEN: WORKPLACE POLITICS AT EDGWICK, A REVIEW OF
FINDINGS

Introduction

Previous chapters outlined the history of the shopfloor organisation at one machine tool plant in Coventry from its re-emergence in the early 1930s to its collapse fifty years later. This concluding chapter will attempt to review the main findings and consider their wider relevance to the study of workplace politics.

A number of findings emerge from this case study which will be listed briefly in the following way. First, the shop stewards had to operate on a political terrain shaped by the managers through their attitude to workplace organisation and, perhaps more fundamentally, through their response to the actions of other, competing firms and state interventions. Second, the technical and social organisation of work fostered a sectional consciousness within the workforce. Third, the shop stewards' organisation actively reproduced that sectionalism. Fourth, the domestic organisation was fragile and directly dependent on favourable conditions in the labour market, on the gains of the district organisation and on state interventions. Fifth, except for a brief period in the re-armament period, the shop stewards kept a sharp separation between party politics and trade union

activity. Sixth, changes in the character of the steward leadership reflected the instability of shopfloor politics. Finally, through its transformations, a factory-based form of corporatism remained a powerful ideological force in the politics of the workplace organisation. I propose to discuss these themes in turn, but under six main headings.

A Management-Created Terrain

Chapter 4 pointed out that Herbert's fierce hostility towards workplace organisation was shared by the other major engineering employers in Coventry before the Second World War. This hostility explains the modesty of the initial gains made by Herbert workers when they re-built the workplace organisation during the re-armament period. Again, this mirrored the tentative revival of trade unionism in Coventry's motor firms at that time.

In chapter 5, the discussion on the limited development of the workplace organisation during the war suggested parallels between Herbert's and what Tolliday called the "core motor firms". In common with his findings on these companies, it was observed that at Herbert's, despite the most favourable circumstances in the labour market and the advent of state policies that set out to restrain employer hostility to the unions, the stewards very modest advances were linked to the relative absence of changes in product design and technique at Edgwick as this restricted the

scope for workers to increase both their bargaining awareness and power over work.

Chapter 6 pointed out how an entrenched managerial conservatism continued to marginalise the shop stewards' organisation at Herbert's long after the war. By the 1960s this feature of shopfloor politics made Herbert's appear an industrial anachronism; but it was not, it was argued, as idiosyncratic as it seemed. Contrary to Tolliday's claim, Herbert's did not exercise tight control over work. Instead, as the same chapter observed, the distinctive feature of workplace politics at Herbert's was that management "delegated" control of production to the piecework chargehands, while some of the local motor firms, like Rootes and Standard, "abdicated" it to the shop stewards. For nearly two decades Herbert's was able to successfully exploit the gang payment system to keep Edgwick locked into the politics of the early 1950s, largely because the dominant members of management were fiercely determined to maintain tight control over labour costs. Occasionally, the production directors voiced support for the conventional formula of 'high wages = high productivity'; but their counsel went unheeded. Crucial to the success of this policy was the fact that most of the senior managers had an overly complacent attitude towards competition in the firm's product markets. Not only did this allow them to tolerate the relatively low productivity that resulted from the firm's byzantine piecework payment system, it also prompted few changes in either technique or product design.

This combination of circumstances created the most favourable conditions in which shopfloor supervision could (1) consolidate a wage-effort bargain that made the majority of the placeworkers a workforce of "satisficers" and (2) keep the stewards' organisation confined to the margins of shopfloor politics.

In chapters 7 and 8 it was argued that the appointment of a new Chairman, eager to "re-model Herbert's for the seventies", led to a radical transformation of workplace politics before the close of the 1960s. In his first years of office, the profound "somnolence" of the workforce probably encouraged the Chairman to 're-model' other features of the Herbert empire; but when one of those reforms, namely the rush to develop and produce eight entirely new machine designs at the plant, exposed shortcomings in the rate-fixing department and de-stabilised the wage-effort bargain, attention was turned to the shopfloor. Modelled on the state-sponsored "experiments" at Fairfield's shipyard, the Productivity Payment Scheme turned workplace politics at Edgwick on its head. To introduce a measured daywork system that was regulated by a computerised production control system, management bureaucratised the chargehands and drew the shop stewards' organisation into a highly formalised and centralised collective bargaining system. Particular aspects of this "re-modelling" were unique to Herbert's. For example, the reforms were not prompted by concerns about 'wage-drift'; and the rush to computerise the control systems of what was a small-batch production process was not emulated by other local engineering firms for some time. But

key features of the scheme link it with the thousands of productivity bargains negotiated across British industry during the 1960s. Though it came at a relatively late date, when the Government's incomes policy already made some kind of 'productivity' criterion obligatory in all pay deals, PPS exhibited features of productivity bargaining's earlier, "classic phase".¹ The scheme was what was then called a 'comprehensive package deal'. While it was clear management intended to reach down and take direct control of production - through the introduction of measured daywork, the open-ended commitment of the unions to accept changes in working practices and the formalisation of the collective bargaining machinery - the new managers also bid for, in Nightingale's words, "an ideological acceptance of change"² by replacing the firm's customary, grudging tolerance of the shop stewards' presence with a corporatist embrace of the workplace organisation. A closed shop was quickly established through "a gentlemen's agreement", office facilities were granted, and the convenor allowed to assume his union duties on a full-time basis. As Terry observed in a general account of shop steward development since the 1960s,³ there is no doubt that such initiatives contributed to the rapid growth in the number of shop stewards that took place in the winter of 1968/69.

Lastly, chapter 8 touched on the failure of management's strategies in breaking through Herbert's slow decline and their contrary effect in accelerating the company's slide towards

bankruptcy. It detailed how, through a series of redundancies in 1971 and 1972, the corporate crisis radically re-fashioned the political terrain once again and precipitated a crisis of morale within the stewards' organisation that began its slow and erratic demise.

The Reproduction of Sectionalism

Chapters 4 and 6 detailed ways in which the production process, mediated through management policies, fostered a sectional consciousness on the shopfloor. The earlier chapter achieved this by looking at the conflicting testimony of retired workers on the character of Herbert's "apprenticeship system". The later chapter reached the same objective by discussing the differing reasons for the shopfloor's quiescence despite the firm's low wage policy.

The production of sectionalism through the technical and social organisation of work is a theme that has been extensively explored by other writers.⁴ Similarly, there are also numerous accounts of how such sectionalism may endanger or hinder the development of an 'integrated' workplace organisation.⁵ For example, in his celebration of "shop stewardliness" in which effective shop stewards are depicted as the "guardians" of unity and equity, Brown also notes the activities of "opportunistic

senior stewards" who exploit a sectional advantage for their personal gain and thus, as Tom Lehrer put it, "do well by doing good".⁶ However, less attention has been given to the ways in which an apparently integrated organisation can actively reproduce sectionalism. In particular, the political significance of shop stewards' involvement in maintaining pay differentials is glossed over. Lazonick's study of workplace politics and technical change in Lancashire's textile mills during the nineteenth century (in which he shows that the minders' domination over the piecers was sustained by, and institutionalised through, the union) is, I would suggest, one of the few exceptions.⁷ Usually, this activity is presented as a kind of patronage with the better organised sections being 'restrained' by a centralised and integrated organisation "to stop the poor old labourer falling behind".⁸ The Edgwick case study can provide quotations that express the same paternalism towards the lower levels of the plant's labour hierarchy. But, as chapter 6 points out, there were also occasions when the organisation's leadership extended a hand to keep the "poor (black) labourer" firmly in his place instead of helping him onto the proverbial coat-tails of his skilled colleagues.

Shop stewards' involvement in the maintenance of 'established inequities' can appear quite benign and unproblematic while those at the bottom of the labour hierarchy quietly accept their subordinate position. When that is no longer the case, when black workers and women workers challenge the 'established inequities',

then the senior stewards, hitherto portrayed as "custodians" of an "integrated" organisation, are seen to be protecting powerful sectional interests.

The same chapter identified two ways in which the toolmakers and the white, male pieceworkers ensured the workplace organisation generally served their interests rather better than the other sections. First, since the leading stewards came from the toolroom and the male piecework gangs, they were pre-disposed to view workplace politics from their perspective. (Though such leadership could be problematic. On a few occasions, for example, the convenor offered to resign as a result of the sectional actions of his immediate constituents.) Second, and more importantly, their interests were better served through the very character of the workplace organisation. The fragility of that organisation, its tenuous links with the membership and its heavy dependence on both a convenor who was adept at "cadging" minor concessions from management and on the power of the district officials to enforce local agreements, were not especially onerous for the skilled workers since, in the last resort, they could rely on the workings of the local labour market to maintain their pay and conditions at levels close to the district average. The reverse was the case for the Asian dayworkers and the women who worked in separate piecework gangs. They needed a rather different kind of workplace organisation than the one patched together in the engineering shops of Edgwick.

Chapter 5 suggests that after the debacle over the redundancies at the end of the 1950s, quickly followed by a pay reform which widened differentials, the mood for change was strong enough in 1961 to make the seemingly impossible happen: Warr's defeat and the election of a semi-skilled pieceworker as works convenor. However, Doughty's triumph turned out to be something of "palace revolution" in that he brought a new style of steward leadership to Edgwick, but not a radical change in the sectional character of the organisation. The locus of power only shifted from the toolroom to the piecework gangs in the fitting shop and machine shop. Thus, when the most marginalised sections of the shopfloor - labourers, crane drivers, packers and shopclerks - suddenly broke the quietude of the factory through a series of strikes of unprecedented duration and intensity, the stewards' committee acted as a spectator despite the fact that the call for a closed shop was one of the strikers' principal demands.

Lastly, through its detailed account of the progress of negotiations over PPS, chapter 8 provides copious evidence to suggest that the interests of the skilled pieceworkers continued to dominate the workplace organisation into the 1970s. From the demand for the "fitters' 1/5d" through to the post-PPS pay talks, the senior stewards accepted pro-rata increases that widened differentials. However, the same chapter also qualifies this picture of the skilled workers' sectional dominance. When the stewards' minutes offer a glimpse of the pay structure negotiated simultaneously at a neighbouring Herbert plant - with its merit

payments for skilled pieceworkers and chargehands and its wider differentials on base rates - it has to be said that the senior stewards at Edgwick were concerned to establish a more egalitarian pay structure than their counterparts at Red Lane.

Dependence on Favourable External Circumstances

The third finding of the case study, namely, the fragility of the stewards' organisation at Edgwick, and its dependence on favourable external circumstances quite outside workers' control, is a theme that has been explored in a number of studies of workplace politics. Here, perhaps the essential difference between Edgwick and organisations in some British motor firms, such as Rootes and Standard, is that the Herbert stewards remained far more directly dependent on the workings of the labour market because those sections which held sway over the stewards' committee had, for many decades, enjoyed a set of circumstances which appeared to deny the need for a strong workplace organisation. Chapter 8 demonstrated that despite challenges 'from below' (from leftist stewards and young workers in the 1930s and early 1940s, from Doughty's 'palace revolution' and the strikes by women and Asian workers in the early 1960s) and 'above' (from the policies of state corporatism imposed during the Second World War, and from the technocratic, company-based corporatism bought in by Young's new executives at the end of the 1960s) the accommodation between the skilled

engineering workers and the 'old' Herbert managers had not only survived but remained a powerful force which largely determined the character of workplace politics at Edgwick. In particular, it ensured that the stewards' organisation remained a marginal political force on the shopfloor despite the managerial reforms that brought it into the centre of a highly formalised pay bargaining system. This political marginality was demonstrated in a clear and cruel fashion when Herbert's corporate crisis broke at the same time as the onset of a generalised trade recession, for the convenor's earnest endeavours could produce nothing more than token resistance to "butcher" Raine's programme of redundancies.

The 'Labourist Fracture'

Chapter 5 drew attention to another feature of the politics of the workplace organisation at Edgwick which other writers have observed as characteristic of British trade unionism, namely the separation between political work outside the factory gates and trade union activity within the plant. This "Labourist fracture", as Hinton called it, was exemplified at the level of the individual, in the political career of Tommy Harris, (that "staunch trade unionist" who became Coventry's first Labour Mayor largely through the good grace of his employer as a reward for "responsible" conduct on the shopfloor) and at an organisational level through acts such as the JSSC's complaints about quarterly

district meetings becoming increasingly pre-occupied with "political matters". In chapter 9, the disabling effect of this split was suggested in Doughty's attitude towards the City Council during Edgwick's last sit-in. Though the local authority has been dominated by the Labour Party (and more particularly by Labour councillors who had worked in the local engineering industry) for many years, Doughty correctly assumed that the Council would not wish to damage its 'classless, technocratic' image.

Patterns of Organisation: Trends Towards Centralisation of Power?

The changes in the power and political orientation of the steward leadership, detailed in chapter 6, do not fit neatly into any thesis about the "bureaucratisation of the rank and file" which asserts an underlying trend towards centralisation within well-established shopfloor organisations.⁹ At Edgwick, power was more centralised during the 1950s than at any time before or since. In that decade Warr was able to make the office of convenor the supreme, decision-making body of the workplace organisation. His successor, Doughty, never enjoyed the same authority. Initially, his weaker position may have been due to the fact that his electoral triumph was the product of an uneasy alliance between the piecework gangs and the dayworkers, in which both factions were concerned to see how he would develop his role as convenor. In addition, he had to cope with a very determined

rearguard action from Warr's supporters. Later, after memories of Herbert's own strike wave had faded and the hegemony of the toolmakers was finally broken, Doughty's authority still remained relatively fragile because of his style of leadership.

Batstone et al would probably have described Warr as a relatively successful "leader steward".²⁰ For most of his years he secured an organisational unity, a kind of "social justice" and, most important of all, a stable bargaining relationship with management. Accomodating himself to the severe limits of workplace organisation offered by Herbert's, Warr exploited his relative autonomy from the stewards' organisation to secure managerial concessions that kept the dominant sections of the membership relatively satisfied. There is no evidence to suggest the other stewards objected to this 'personal approach' to collective bargaining. Indeed, as Batstone et al observed in another local case study, they may have expected him to act in this way so long as he could continue to "cadge" reasonable compromises.²¹ As management's 'tough' stance towards the unions created circumstances that provided little opportunity for work groups to achieve their goals independently, Warr's 'successes' were virtually guaranteed to reinforce his personal authority and consequently allow him to further exploit the structural slack in his position. "Cadgerism" proved a viable style of leadership for many years. However, at the end of the 1950s it became a liability. Seen as being too close to management, Warr could not avoid the blame for the committee's debacle over the redundancies

and the inequities of the pay reforms introduced immediately after.

Doughty never acquired the same dominance. Initially, while management's firmness continued to limit the possibilities of effective sectional action, Doughty's position was weakened by his decision to challenge the limits of workplace politics through his "straight", class-conscious approach to collective bargaining. In effect, he seriously de-stabilised the bargaining relationship with management and brought an immediate end to the trickle of minor concessions that had been the rewards for Warr's more accomodative approach. Doughty's survival as works convenor during the last years of the 'old' Herbert management probably owed as much to the strength of the sectional antagonisms between the piecework gangs and the toolmakers as to his personal stamina. At the end of the 1960s, when new managers ushered in a 'softer', corporatist approach to the domestic organisation, and weakened the control systems by 'bureaucratising' and consequently alienating a large section of firstline supervision, Doughty's authority was frequently challenged by work groups testing out the limits of change. Though a detailed consideration of the 1970s is outside the scope of this work, it is worth noting that the convenor's office only acquired some of its former power when economic crisis and decline once again severely restricted opportunities for successful sectional action.

One conclusion to draw from this narrative is that the shifts of

power it describes do not support general statements about trends in the internal centralisation of power. Ironically, Hyman's thesis draws particularly on a local case study which also describes the decline in the authority of the convenor's office. In their own review of that study, its authors, Batstone et al, claim they found no evidence to suggest the changes they observed favoured the posited trend. On the contrary, from the analysis of data on works conferences over a ten year period, they argue that in the late 1970s many domestic organisations underwent a fractionalisation of power. Their conclusion is that, while there may be "important underlying trends, the actual history of domestic organisations is crucially affected by factors which, from the perspective of grand developmental theories, can only be described as 'disruptive events'." From another perspective, of course, such 'disruptive events' typify the instability of the capitalist labour process (or, as they put it, "the fact that industry is subject to a series of crises and shocks which relate to the continuing process of development and change within our society."). However, Batstone et al do offer one generalisation (and then immediately qualify it) that appears to fit the Edgwick case study, namely "that in times of economic crisis or managerial firmness of a major kind, the focus of decision-making tends to move up the union organisation" as "work groups are less able to achieve their goals independently".¹²

Corporatism: A Pragmatic Approach to the Limitations of Workplace Politics?

Chapters 6, 8 and 9 explored the changing form of corporatism in the senior stewards approach to workplace politics at Herbert's through the post-war years. The same chapters rooted that description of corporatism in an account of the severe limitations imposed on shopfloor unionism by some of the factors discussed earlier in this chapter, namely: the sectional character of the workplace organisation; its fragility and dependance on external conditions; and the 'labourist fracture' between party politics and trade union activity. Chapter 10 developed this argument by linking Edgwick with the corporatist strategy of the CMTC combine, and by exploring the reasons for the Workshop's inability to shift the convenors from their 'pragmatic' approach to the redundancy crisis.

During the 1950s, the main focus of chapter 6, one form of factory-based corporatism was exemplified in the senior stewards' active embrace of the harsh realities of workplace politics that existed in the final phase of Herbert's authoritarian paternalism. It was a kind of corporatism that could be symbolised in the stewards presentation of the silver tray to the personnel officer. The same chapter also pointed to a number of occasions when both management and membership marked out some of its boundaries, such as the occasion when the managers rejected the convenor's profit-sharing scheme and the time when a section

steward objected to the managers' presence at a vote during a JSSC meeting. The force of this particular form of corporatism owed much to the strength of employer paternalism at Herbert's and its commonality with the labour policies of some of Sir Alfred's peers, though it probably owed more to the sectional character of the stewards' organisation. For it was an ideology which spoke of one aspect of the experiences of the skilled engineering workers at Edgwick. For reasons explained elsewhere, craft workers had little need for an ideology that sustained a combative shopfloor organisation. They did not need to identify and continually re-affirm values that evoked a conflict model of industry and asserted the primacy of the collective over the individual. The individualism of the craft worker, manifest particularly in his inclination to 'play' the labour market rather than organise a collective challenge to managerial power, has been observed by other writers.²³ At Edgwick, this tendency was reinforced by Herbert's wages policy which created a chronic shortage of skilled labour and so made management especially vulnerable to this tactic.

This variant of factory-based corporatism quickly waned after the redundancies in the late 1950s. But chapter 8 showed that, as an ideological force in the shop stewards' organisation, corporatism itself did not pass away. Despite the cruel disappointments over HPL's new, technocratic version of a company-based corporatism, it continued to influence the stewards' actions because, at its core, corporatism embodied a recognition of the mutual dependence

of employer and worker. I was, for example, this assumption which, in 1971, prompted Doughty to invite senior management to support the TUC's lobby of Parliament on the issue of unemployment. Again, these are general features of trade unionism which have been observed by other writers,¹⁴ though given a distinct inflection from the history and character of Herbert's labour relations.

Chapters 8 and 9 could only hint at the way Herbert's malaise re-shaped this corporatist ideology. In previous crises, the stewards had appealed to the state to come to their rescue by providing additional orders or encouraging a general revival of the economy; but in 1974, the election of a Labour Government encouraged Doughty to place more hope in corporatism at the level of the state rather than the factory. Briefly, during Benn's interregnum at the Department of Industry, it seemed that the state would realise that hope; but Benn was quickly shuffled to another government post and the 'corporate plan' was abandoned in favour of continued job cuts. Despite this disappointment it is clear that Doughty did not review the situation. His involvement in the CMT's campaign for selective import controls, discussed in chapter 10, represented a major extension of this form of politics. In response to a succession of redundancies, the combine appealed directly to the state to rescue British industry from the encroachments of foreign firms.

Chapter 10 developed the theme of the pragmatic character of the

stewards' corporatist strategy by considering the factors that helped decide the failure of the Workshop's interventions. It was argued that, despite a broad acceptance of the Workshop's economic analysis, the senior stewards rejected our political prescriptions because they were clearly 'impractical' both in terms of their approach to the state and, more importantly, in their assumption of the radical potential of workplace organisation given (a) the determination of employers and state officials to push through massive redundancies and (b) the limitations imposed by some of the central traditions of British trade unionism.

Conclusions

The central conclusion to emerge from this review of the Edgwick case study is that while some aspects of the history of stewards' organisation were anomalous when compared with those located in the other, large engineering plants in post-war Coventry, they were not entirely aberrant forms of workplace trade unionism. Instead, this chapter suggests that such features as the unusually long period of domination of the toolmakers over the semi-skilled placeworkers and, during the 1950s, the stewards accommodation to an authoritarian form of employer-paternalism rooted in the politics of the Edwardian era, were shaped by the same social forces and values that have been observed in other studies of British trade unionism: the dominant influence of

managerial policies; the dependence on favourable external circumstances; the organisation's reproduction of the sectional experience of work; the labourism that allowed active trade unionists to separate factory politics from those outside the plant and accommodate the corporatist ideology of their employer, state officials and local councillors. It was the outcome of those social processes that made Herbert's experience distinctive. The stewards 'pragmatic' accommodation to the limitations imposed by those same factors marginalised the Workshop's political interventions and made the demise of the shopfloor organisation inevitable.

Chapter Eleven: Endnotes and References

1. Martyn Nightingale, "UK Productivity Dealing in the 1960s", in *Capital and Labour*, (ed.) Theo Nichols, (London: Fontana, 1980), p. 329.
2. Ibid., p. 327.
3. Michael Terry, "Shop Steward Development and Managerial Strategies", in (ed.) George Bain, *Industrial Relations in Britain* (Oxford: Blackwell, 1983) pp. 91-5.
4. See, for example: Tony Lane, *The Union Makes Us Strong* (London: Arrow Books, 1974); Theo Nichols and Huw Beynon, *Living with Capitalism: Class Relations and the Modern Factory* (London: Routledge & Kegan Paul, 1977); Huw Beynon, *Working For Ford* (Wakefield: E.P. Publishing, 1978) (reprint); Theo Nichols and Peter Armstrong, *Workers Divided: A Study in Shopfloor politics* (London: Fontana, 1976).
5. See, for example: Paul Thompson and Eddie Bannon, *Working the System: The Shop Floor and New Technology* (London: Pluto Press, 1985); Eric Batstone, Ian Boraston and Stephen Frenkel, *Shop Stewards in Action: The Organisation of Workplace Conflict and Accomodation* (Oxford: Basil Blackwell, 1979); Nichols and Beynon, *Living with Capitalism*.
6. William Brown, *Piecework Bargaining* (London: Heinemann

- Educational Books, 1973), p. 142.
7. William Lazonick, "Industrial Relations and Technical Change: The Case of the Self Acting Mule", *Cambridge Journal of Economics* 3 (1979).
 8. Brown, *Piecework Bargaining*, p. 139.
 9. Richard Hyman, "British Trade Unionism in the 1970s: The Bureaucratisation of the Rank and File?", mimeo (1979?), pp. 6-8. This thesis is given tentative support by Michael Terry in "The Emergence of a Lay Elite? Some Recent Changes in Shop Stewards Organisation", Discussion Paper No. 14, November 1974, Industrial Relations Research Unit, Warwick University, pp. 8-9.
 10. See Batstone et al, *Shop Stewards in Action*, pp. 34-5 for a typology of stewards.
 11. Ibid., pp. 112-5.
 12. Ibid., pp. 216, 216, 217, 218, 219.
 13. See, for example, the image of craft workers in Harley Shaiken, "Impact of New Technologies on Employees and Their Organisation" (preprint, International Institute for Comparative Social Research, 1979); and Robert Schrank, *Ten Thousand Working Days* (Cambridge, Mass.: MIT Press, 1979), pp. 69-84. However, one account that stresses the element of workshop collectivism that is also found in the 'craft tradition' is contained in James Hinton, *The First Shop Stewards' Movement* (London: Allen & Unwin, 1973), ch. 2.
 14. See, for example, Tony Lane, *The Union Makes Us Strong*, chs. 6 and 7.

APPENDIX ONE: NOTES ON THE CMTC COMBINE

Shopfloor Politics at Morthey Road and Banner Lane

At Webster & Bennett, the workplace organisation was small (eight shop stewards represented some 300 workers on the shopfloor) and weak, but highly centralised. In 1981, Leszczyszyn observed JSSC meetings were called at the whim of the convenor, no minutes were taken or reports posted on the board. Those who attended did so principally to learn of the activities of the convenor and his deputy. He also found there had been an almost complete turnover of stewards before his visit, so that most of those he interviewed were relatively young and inexperienced.³

Like Freddie Warr, Alex enjoyed a cosy, personal relationship with the senior managers; but there the similarity ends. In 1970, Alex became the factory's first convenor. Until then, the hostility of plant-level management had forced the unions to organise on a clandestine basis.⁴ For the next five years workplace politics was characterised by a series of confrontations as both sides tested the limits of their power on the shopfloor.⁵ Though part of the John Brown Group since 1952, Webster & Bennett was managed by its original owners - and in the autocratic style of many family businesses in the machine tool industry - until 1975.⁶ In that year the firm became part of the conglomerate's Machine Tool Division. Anticipating the need to

re-structure its machine tool interests in response to the continuing trade recession, corporate management decided a more centralised structure was necessary. As part of this centralisation, corporate management made new appointments to re-fashion its labour policies." Three years later and, coincidentally, shortly after the formation of the CMTC, these changes were felt at Northey Road when Webster & Bennett's Chief Executive made his first site visit."

In a series of shopfloor meetings, he warned of the plant's closure if there were no improvements on 'performance'. Six months later, he gave the workforce a 'reprieve' and then proceeded to implement his vision of "practical industrial democracy". Union membership was actively encouraged; a "consultative committee" (a sort of latter-day JPC composed equally of stewards and worker representatives and chaired alternately by the Chief Executive and the convenor) was set up to broaden "worker participation" on issues traditionally outside the province of collective bargaining; and, perhaps most importantly, the convenor was appointed as the firm's new Labour Executive. Chiefly responsible for administering the firm's various welfare provisions, Alex was also invited to attend production meetings and, despite the sullen opposition of first-line supervision, encouraged to sort out any 'labour difficulties' using, if necessary, his direct access to the Chief Executive to do so. Alex was groomed for personnel management or, as the Chief Executive put it, the post was intended "to provide

a career path for experienced and knowledgeable trade union officials within the Company".⁷ On one occasion, Alex was offered the post of personnel manager at Wickman's Banner Lane plant; but the opposition of the stewards there blocked his appointment.⁸ (Not surprisingly, this particular development caused some tension between the two convenors - a tension that surfaced just once or twice in the Workshop's presence at the final meetings of the CMTC.)

Initially, this new partnership between labour and capital benefitted both sides. Through a re-vamped productivity scheme, management secured major changes in working practices. For their part, the shopfloor workers enjoyed a substantial rise in earnings and improvements in various welfare provisions, including a sick pay scheme which provided benefits at 100% of earnings. But it was not long before "practical industrial democracy" revealed another purpose.

At the beginning of the 1980s - as the NEB began dismembering the Herbert 'empire' - the recession began to seriously affect orders at Webster & Bennett. Soon there were cuts in the work programme and short-time working. Earnings quickly fell below the district average. To discourage abuse of the sick-pay scheme, the Labour Executive reduced benefits to 75% of earnings - a decision he took without consulting other stewards or members of the "consultative committee".⁹ Then, in March 1981, when management announced 90 redundancies, Alex and the deputy convenor were

given the main responsibility for selecting those who should be dismissed. Perhaps it is not surprising that when, shortly after this exercise, Leszczyszyn tried to probe employees' attitudes on "worker participation", he found among workers, stewards and foremen a strong reluctance to antagonise the convenor.¹⁴ Within three years, Alex's embrace of the Chief Executive's brand of factory-based corporatism was so enthusiastic that he succeeded in pressing together the role of personnel officer and steward.

At Wickman's Banner Lane plant, the workplace organisation was larger than the one at Webster & Bennett (during the 1970s it covered some 800 workers) and poorly integrated. Yet it shared some similarities with the Northey Road plant. Shortly after the war, Wickman's was acquired by the same parent company and the same, initial policy of de-centralisation allowed plant-level management to shape its own labour policies with a considerable degree of autonomy. However, these policies bore little resemblance to the 'tough', anti-union stance adopted by the former owners at Northey Road.

Brown's study suggests that at the beginning of the 1970s, management was more concerned about securing greater productivity than holding down labour costs. This strategy had created weak management control systems which, in turn, had produced an "indulgent junior management". Amongst the engineering firms Brown selected for his ten case studies on piecework bargaining,

Wickman's exhibited the highest 'Topsy factor' (ie the extent to which piecework wage increases rose outside the formal negotiating process) and the greatest 'leniency' on custom and practice. As bargaining awareness and power varied considerably between sections on the shopfloor, these 'indulgency patterns' discouraged the development of an integrated workplace organisation.¹¹

Brown found "the dominant pieceworking stewards made no attempt to co-ordinate or assist the claims of indirect workers" (some of whom had opted out of the committee altogether). Also, the committee "kept no minutes, had no standing orders and kept few records." Sectional stoppages were frequent and, instead of finding evidence of a stable bargaining relationship, "mistrust of management was considerable" among the stewards. There was a high turnover of stewards (the average period in office was two years). Finally, it seemed that the only people attracted to the senior steward's job were those who saw it "as a way to extra cash": the piecework earnings of three of the four dominant stewards were consistently 40% above their section averages - achievements unrelated to skill or effort - while the fourth was an elderly man.¹² This then depicts a fragmented, or weakly integrated, stewards' organisation. It is difficult from the limited information available to trace the development of that pattern to the one encountered by Coventry Workshop; but, it seems likely that, in the latter half of the decade, the combined effect of the recession and senior management's determination to

take greater control of production - as a part of John Brown's Machine Tool Division, Wickman's did not escape the industrial relations reforms promoted by corporate management²³ - must have strengthened the convenor's position at the expense of the (hitherto) "dominant senior stewards". Certainly, by the time the combine was created, a leadership style had emerged which, while less autocratic than the one at Northey Road, still enjoyed considerable autonomy from the steward organisation.

These brief notes provide a glimpse of the character of the two workplace organisations that kept the CMTC combine 'alive' after February 1980 when the senior stewards became pre-occupied with their own struggle for survival. As it happened, the combine did not outlast Doughty's departure for many months. The next section traces the final moments of the stewards' campaign, as I witnessed them from my position as one of Coventry Workshop's volunteers.

The End of a Campaign

In March 1980, three months after the sudden termination of my fieldwork at Edgwick, the Coventry Machine Tool Committee's (CMTC) executive was re-convened to consider the Workshop's proposal to go ahead with the much-delayed plan to hold a national delegate conference of shop stewards in the machine tool

industry.

At that meeting most of the discussion focused on the news that Wickman's management had secured a license to produce a single-spindle machine designed by a Japanese company.²⁴ The deal was very similar to the one rejected by the shop stewards three years earlier, and which had provided the spark for the CMTC's campaign. This time, having experienced one round of redundancies, the membership welcomed the deal and, despite their reservations, the stewards felt obliged to negotiate its implementation.

There was no enthusiasm for the Workshop's proposal to convene a national delegate conference - though it contained the offer of shouldering all the organisational and administrative work. Once again, the convenors wanted to gauge support before taking a decision. The Workshop, eager to put this question to rest, agreed to do this 'survey' work too.

Six months later, the CMTC executive - now reduced to two convenors: Bert Kingham (Wickman) and Alex Boyd (Webster & Bennett) - finally allowed the conference preparations to go ahead. But their mood was despondent and aggressive. They were unimpressed with the Workshop's report-back on the level of support for the event - out of some 77 plants contacted about the conference only stewards at nine said they would attend (on the day representatives from just four of those plants kept that

promise) - and the news from Edgwick suggested that the executive's third convenor and 'star' of the campaign, Ron Doughty, would be made redundant within days. Bert felt the CMTC had achieved nothing and no longer had any purpose since his own plant was now dependent on a licensing agreement with a Japanese firm. Both convenors believed only one task remained: to ensure the conference - or "seminar" as it was now called - did not discredit the campaign's demise. With that aim, it was agreed that only the morning session would be devoted to the machine tool workers' "seminar"; the afternoon session, planned to be addressed by Tony Benn, would be turned into a public meeting. In their comments, the convenors barely concealed their resentment at what they regarded as the Workshop's aggressive advocacy of the seminar.

In the event, the occasion did not turn out as anyone had quite imagined. It was not the 'funeral service' the two convenors had anticipated. The presence of delegates from ten different plants and the power of Benn's oratory, his appeal to the audience to "prepare for power" by devising a "national plan" for the industry, stirred feelings that some kind of campaign should be continued. But Alex did not allow the mood to overwhelm him. Determined to keep control of the situation by stalling any decision on the future of the campaign, he blatantly mis-used his authority as Chair by ignoring key items on the agenda (prepared by the Workshop) and refused to accept motions from the 'floor'. Consequently, alongside renewed feelings of optimism, fresh

resentments were stored up.

At an internal review a few days later, the Workshop determined it could no longer act as "a substitute for (the stewards') self-organisation". The CMTC had to be told that, having obtained the basis for an effective, national campaign, they now had to work out both their own objectives and how the Workshop could assist them - assuming, of course, that there was mutual agreement on aims.

At the next meeting with the CMTC, the mood was noticeably good humoured and friendly compared to earlier days. It was agreed that there should be a "national machine tool group". There was even talk of forming a "steering committee" to achieve that objective by inviting all the delegates who had attended the seminar to a meeting at Sheffield. But, none of the stewards voiced an opinion on the future purpose of the campaign. More significantly, no date was fixed for the "steering committee's" first meeting.

In December, when the Workshop renewed contact with the convenors, it was clear there had been no progress. It was also apparent that the optimism generated by the seminar had gone. For their part, the Workshop's determination to negotiate a new contract with the CMTC had evaporated, too. For the time being it seemed enough that the convenors were still talking about forming some kind of national combine. However, we were soon reminded of

the limitations of the role provided for us in this new phase of the campaign.

In January 1981, Bert telephoned the Workshop to ask for details on grinding machine manufacturers in the UK. He explained that this information had been requested by the Rolls Royce JS5C. Since this appeared to be an example of the link between 'builders' and 'users' of machine tools that the Workshop had sought to encourage, the research was undertaken and the information 'phoned through to Bert within 24 hours. In response, he made a vague agreement to meet the Workshop to discuss the data. When he rang back again, a few days later, he talked about arranging a tri-partite meeting involving the campaign committee, the Rolls Royce stewards and the Workshop; but, as before, he suggested no possible dates. Then, a week later, he telephoned to ask for the full list of machine tool manufacturers. A meeting with the Rolls Royce workers was fixed for the end of the month; but the Workshop was not invited. During the same telephone conversation, Bert also mentioned his plans for the Sheffield meeting and complained about how little time he had to do the necessary contact work. The Workshop's staff made some sympathetic noises, but, feeling rather 'used' over the grinding machine project, refused to be drawn into volunteering any assistance.

The "steering committee" meeting did not take place until the end of February 1981. By then the Workshop had learned that, despite

a ruling from the AUEW district committee, Alex was continuing to combine his duties as works convenor with that of "Labour Executive" at the Worthey Road plant. Also, Bert had made it clear that the Workshop was not expected to attend. However, we chose to ignore his heavy hints, hoping against hope that the event would produce a new constituency with whom we could establish a more fruitful dialogue.

The meeting took place at Sheffield. Twelve delegates from six plants, plus an unemployed worker, attended. The debate in the morning seemed positive. Agreement was reached on the need to form a national combine of shop stewards that would campaign for "nationalisation under workers' control". When the unemployed worker (coincidentally, a member of the Communist Party) raised the demand for selective import controls he found no support among the delegates from Wickman's and TI Churchill who argued strongly that their jobs depended on Japanese imports. A national executive, which included representation of the unemployed, was elected and there was also discussion about establishing regional committees as the campaign progressed. After this, I anticipated an afternoon session in which the next step in that campaign would be debated; but then, just a few minutes before lunch, Alex 'observed' the delegates wanted to return home before dark and promptly closed the conference.

During lunch, the delegates formed into two cliques: those from Wickman, Webster & Bennett and TI Churchill grouped in one corner

of the room; those from Asquith, Herbert's and Snow & Co sat with the Workshop's representatives. After some messages were exchanged between the two cliques, Alex agreed to 're-open' the meeting in the bar. In the brief debate that followed, the delegates accepted the Workshop's proposal to contact the Joint Forum of Combine Committees and the TUC-LP Liaison Committee - Alex commented afterwards that these ideas could have been put to him informally and he would have "fixed something up" - and agreed to convene the newly-formed National Executive within a month.

The fact that this debate had to be forced through created a bitter atmosphere and set the scene for some acrimonious exchanges between several delegates. Initially, the argument was about a variant of Michel's iron law of oligarchy - namely, more members resulted in the centralisation of power on the shopfloor - but it quickly degenerated into a dispute about who possessed the most authority as convenor in which Alex and Bert made the greatest boasts about their power.

Following this meeting, the Workshop decided against any further, active involvement in the affairs of the stewards' campaign. Ironically, at the moment when the Workshop's hopes seemed fulfilled, when a national combine had been established to campaign for "nationalisation under workers' control" and the same body vehemently opposed import control, at that very moment it was obvious that the campaign was really at an end. The

Sheffield conference was the 'funeral service' both convenors had prepared themselves for many months before.

But before it finally slid into oblivion - when Bert, along with most of his senior stewards, volunteered for redundancy - the CMTC caused one more minor stir in the local newspaper. In March that year, Alex, claiming to represent the committee's views, made public his opposition to the local authority's decision to provide a loan to enable a small firm to purchase a Japanese machine tool.¹⁸ The Workshop later learned that he was 'carpeted' by the Wickman stewards for failing to consult them over the press statement. That, as far as the Workshop was aware, was the combine's last act.

Appendix 1: Endnotes and References

1. Roman Leszczyszyn, "An Investigation into Industrial Democracy in Brewster & Bennett Ltd.", unpublished thesis submitted for Diploma in Industrial Relations, Lancaster Polytechnic, June 1981, pp. 14-20.
2. Alex Boyd, interviewed in 1979 during the preparation of Coventry Workshop's report *Crisis in Engineering*.
3. Ibid.; Leszczyszyn, "Brewster & Bennett Ltd.", pp. 16, 32.
4. Leszczyszyn, "Brewster & Bennett Ltd.", p. 10.
5. Ibid., pp. 10-11.
6. Ibid., p. 12.
7. Ibid., pp. 4, 12-3, 20, 21-4, 27.
8. Bob Griggs, then senior ASTMS steward at Wickman's, interviewed on 5 February 1980.
9. Leszczyszyn, "Brewster & Bennett Ltd.", p. 29.
10. Ibid., p. 35.
11. William Brown, *Piecework Bargaining* (London: Heinemann Educational Books, 1973), pp. 143, 166.
12. Ibid., pp. 141-3.
13. Bob Griggs, interviewed on 23 May 1980.
14. This is a reference to the Tar-Seiko company.
15. "Stop the Cheque", *Coventry Evening Telegraph*, 6 March 1981.

NOTES ON METHODOLOGY AND A SELECTED BIBLIOGRAPHY

Fieldwork:

As the opening chapter suggests, this work is unlike most doctoral research in that it attempted to address some of the short-term needs of a working class constituency through a long-term academic project. I have also tried to show, perhaps most particularly in chapter 2, how the 'progress' of the research became entangled with the falling fortunes of that constituency and necessitated, on more than one occasion, a change of aims, as well as methodology.

These changes are reflected in the way I gathered and used interview material on Herbert's. In chapters 6 and 8, for example, the interpretation of the union's records was influenced in part by informal conversations with about a dozen stewards and members with whom I enjoyed frequent contact through the Workshop during a period when there was still some hope the stewards would launch a national campaign. In contrast, much of the interview material used in chapter 4 was gathered sometime after the demise of the CMTC combine, when the research no longer had an immediate working class constituency and much of my time was spent at the University. Also, ten informants were contacted through the 'letters column' in the local newspapers, or as a result of

visits to Herbert's recreation club, instead of through the stewards' network; they were visited rarely more than twice; and taped during comparatively structured interviews.

As circumstances determined, I used either my on-going association with the Workshop or my academic credentials to gain access to information. For example, to carry out the case study of new technology at Edgwick I had to approach Herbert's management as a postgraduate student. However, in all but the final phases of the fieldwork I used the Workshop as my 'base'. In addition to helping me to remain conscious of the short-term 'activist' aims of the research, this allowed me to become familiar with the Workshop's approach to factory-based work and the changing character of its relationship with local labour organisations as the harsh climate of Thatcherism took hold of industrial politics.

Notes on Primary Sources:

The major part of the primary documentary sources for the Edgwick case study became available after the takeover by Tooling Investments and the subsequent departure of all the senior shop stewards. In June 1981, the newly-elected convenor for workers in the 'new-build' section of the plant responded to my request for access to union records by handing over a cardboard box filled with notebooks and various papers which, he said, were discovered

In an old ammunition box in the union office. In addition to a miscellaneous assortment of documents, including a photocopy of correspondence between the works manager and the AES district secretary in 1898, the 'ammunition box papers' contained:

1. works convenors' log books covering most of the period from November 1951 to September 1980 (unfortunately most of the notes are rather cryptic);
2. the JSSC minute books which recorded most of the JSSC's meetings between March 1942 and December 1968;
3. the JSSC Secretary's log books covering the years 1962 to 1979 in three periods: January 1962 to July 1964, September 1968 to December 1971, and March 1973 to November 1979. From 1968, they provide an invaluable record of the organisation's activities, containing details on meetings of the full JSSC and its executive committee, as well as the minutes of a number of sectional meetings, and the formal negotiations with management.

Other, very useful, primary documents became available after Tooling Investments' takeover, when a junior manager, intent on clearing out his office, gave the stewards the Industrial Relations Officer's manuscript minutes of meetings with the stewards from January 1941 to May 1948 inclusive, mistaking them to be the unions' records of talks with management. Shortly after the works convenor, Ron Doughty, was made redundant, he very kindly loaned these notebooks to me.

Also, in April 1983, additional records were transferred from the company's liquidator to the City Record Office. Accession 926, as they are collectively known, contain some minutes that are rather more illuminating than the records deposited before the company's collapse. Particularly useful are:

1. the minute book of the Board of Directors covering meetings from March 1944 to September 1960;
2. the minute books of the Departmental Board of Directors covering September 1941 to January 1945, January 1945 to November 1951, and February 1952 to January 1961.

Similarly, I could not obtain an extensive collection of the firm's annual Report and Accounts until Herbert's demise. However, not all the internal company documents were obtained after the crash. Minutes of the site consultative committees, and other papers relating to the 'participation period' of 1974-75, were given to Coventry Workshop by former staff stewards in 1978 when colleagues were preparing the report *Crisis in Engineering*. Likewise, copies of the house journal, *Alfred Herbert News*, were made available during fieldwork in 1979. The more useful articles are cited in the references at the end of each relevant chapter. At that time I was also given copies of several technical articles which, though unattributed to any national journal, had clearly identified authors and printed or re-printed by Herbert Machine Tools Ltd.. Particularly useful were:

W.A. Hawkins, "Herbert's Big Switch to OT", reprinted at an unspecified date.

Craven, F., "The Use of NC in Group Technology" printed by Herbert Machine Tools Ltd. also at an unspecified date.
Wightman, E.J., "Benefits of Computer Numerical Control (CNC) for Machine Tools", printed by HMT, undated.

The following reports of management consultants, loaned and given to me by former stewards at Herbert's, provide the final category of primary documents for the Edgwick case study:

1. Peat, Marwick, Mitchell & Co., "Alfred Herbert Limited", a report dated 20 December 1974;
2. Idem, "Alfred Herbert Limited, Draft Documents for Discussion", (with appendices in a separate volume) dated 7 March 1975;
3. Industroon Ltd., "Multi-Client Production Lathe Survey - Report B: The United Kingdom Market for Capstan and Turret Lathes", prepared by Industroon Ltd., Birmingham, in September 1973.

Newspaper clippings held at the City Record Office and Coventry Workshop have proved useful 'primary' documents. The clippings in the library of the latter organisation contain national and local media coverage during the 1970s. Those at the City Records Office are extracted from the local press but cover the earlier years.

Selective use was made of the AEU Coventry District Committee minutes held at the local offices of the AUEW (Engineering Section).

Interviews with a large number of former managers and stewards have provided a rich source of oral evidence of events at Edgwick. Instead of naming them here, I believe it is sufficient to point out that key informants are listed in the endnotes to the relevant chapters. Many of these interviews were transcribed and, as such, will be deposited at the City Record Office in 1988.

Finally, it is worth noting that I came across two other collections of primary documents which were not used in this case study. They are, firstly, the papers deposited with the Hollick family (in-laws to the Herbert's). A catalogue of those papers is kept at the library of Coventry Polytechnic. (They were not made available to me; but when I last enquired, negotiations were proceeding to make them more publicly accessible.) The second set of primary documents is a collection of the correspondence between Sir Halford Reddish and Sir Alfred Herbert. Containing some account of their respective views on, and support for, the principles of 'Christian Management', these papers are held at the Modern Record Centre, University of Warwick.

Secondary Documentary Sources:

- ALDCROFT, D.H., "The Performance of the British Machine-Tool Industry in the Interwar Years", in *British Industry Between the Wars: Instability and Industrial Development, 1919 - 1939* (eds.) Buxton, N.K. and Aldcroft, D.H., (London: Scolar Press, 1979).
- ALEXANDER, K.J.W. and JENKINS, C.L., *Fairfields* (London: Allen Lane, 1970).
- ALLEN, G.C., *The Structure of Industry in Britain* (London: Longmans, 1961).
- American Machinist (eds.), *Metalworking: Yesterday and Today* (New York: McGraw-Hill, 1978).
- ANON., "Tube Investments", *Social Audit* Vol. 1, No. 6 (Winter 1973/74).
- ARMSTRONG, P. and NICHOLS T., *Workers Divided: A Study in Shopfloor Politics* (London: Fontana, 1976).
- BATSTONE, K., BORASTON, I. and FRENKEL, S., *Shop Stewards in Action: The Organisation of Workplace Conflict and Accomodation* (Oxford: Basil Blackwell, 1979).
- BELL, R.M., *Changing Technology and Manpower Requirements in the Engineering Industry* (Watford: Engineering Industry Training Board, 1972).
- BRNINGTON, J. "Strategies for Change at the Local Level: Some Reflections" in *Community Work: One* (eds.) Jones, D. and Mayo, M. (London: Routledge & Kegan Paul, 1974).
- BEYNON, H., *Working for Ford* (Wakefield: E.P. Publishing, 1978),

reprint.

- BHATTACHARYYA, S.K., "Penetration and Utilisation of MC/CNC Machine Tools in British Industry" (unpublished report, University of Birmingham, 1980).
- Board of Trade, "The Machine Tool Industry: A Report to Consider Professor Melman's Report to the European Productivity Agency", London: HMSO, 1960.
- BRANSON, W. and HEINEMANN, M., *Britain in the Nineteen Thirties* (St. Albans: Panther, 1973).
- BRAVERMAN, H., *Labor and Monopoly Capitalism*, (New York: Monthly Review Press, 1974).
- BROOKS, D. and SINGH, K., "Pivots and Presents: Asian Brokers in British Foundries" in *Ethnicity at Work* (ed.) Wallman, S. (London: Macmillan, 1979).
- BROWN, W., *Piecework Bargaining* (London: Heinemann Educational Books, 1973).
- Coventry Workshop, *Crisis in Engineering: Machine Tool Workers Fight for Jobs* (Nottingham: Institute for Workers' Control, 1979).
- Coventry Workshop, "Alfred Herbert R.I.P. (Rationalised, Ignored, Pillaged)", *Coventry Workshop Bulletin* 40 (October-November 1983).
- CARR, P., "Municipal Socialism: Labour's Rise to Power", in *Life and Labour in a Twentieth Century City: The Experience of Coventry* (eds.) Lancaster, B. and Mason, T. (Coventry: Cryfield Press, n.d.).
- CASTLE, J., "Factory Work for Women: Courtaulds and GEC Between

- the Wars", in *Life and Labour in a Twentieth Century City*
(eds.) Lancaster and Mason.
- CHRISTENSRN, E., *Automation and the Workers* (London: Labour
Research Department, 1968).
- Cmd. 3874, *Investment Incentives*, London, HMSO, 1966 (reprinted
1970).
- CROUCHER, R., "Left Wing Politics and the Shop Stewards' Movement
in Engineering, 1935-46" (Ph.D. thesis, University of
Warwick, 1978).
- CROUCHER, R., *Engineers at War* (London: Merlin Press, 1982).
- DAVIES, J.McG., "A Twentieth Century Paternalist: Alfred Herbert
and the Skilled Coventry Workman", in *Life and Labour in a
Twentieth Century City: The Experience of Coventry* (eds.)
Lancaster, B. and Mason, T. (Coventry: Cryfield Press, n.d.).
- DOBB, M., *Studies in the Development of Capitalism* (London:
Routledge and Kegan Paul, 1963).
- DUFFIELD, M., "Rationalisation and the Politics of Segregation:
Indian Workers in Britain's Foundry Industry, 1945-62" in
Race and Labour in Twentieth Century Britain (ed.) Lunn, K.
(London: Frank Cass, 1985).
- ELBAUM, B., LAZOWICK, W., WILKINSON, F. and ZEITLIN, J., "The
Labour Process, Market Structure and Marxist Theory",
Cambridge Journal of Economics 3 (1979).
- FLOUD, R., *The British Machine-Tool Industry, 1850-1914*
(Cambridge: CUP, 1976).
- POSTER, G., "Heirs of Alfred Herbert", *Management Today* (May
1982).

- FRIEDMAN, A.L., *Industry and Labour: Class Struggle at Work and Monopoly Capitalism* (London: Macmillan, 1977).
- HERBERT, A., *Shots at the Truth* (Coventry: Alfred Herbert Ltd., 1948).
- HINTON, J., *The First Shop Stewards' Movement* (London: Allen & Unwin, 1973).
- HINTON, J., "Coventry Communism, A Study of the Communist Party and Factory Politics During the Second World War", *History Workshop Journal* 10 (1980).
- HOBBSBAWM, E.J., *Industry and Empire* (London: Weidenfeld and Nicolson, 1968).
- HOLLEN LERS, L., "Review of Joyce, P., *Work, Society and Politics*", *Social History* 8, 2 (May 1983).
- HOLLINGUM, J., "Machine Tool Makers are Stripping for the Fray", *Engineer* 10 (February 1972).
- HYMAN, R., "British Trade Unionism in the 1970s: The Bureaucratisation of the Rank and File?", mimeo, (1977).
Later published under the same title in *Capital & Class* 8 (Summer 1979).
- Income Data Services, "Focus 1", *IDS* (May 1976).
- JONES, B., "Destruction or Re-Distribution of Engineering Skills? The Case of Numerical Control", in *The Degradation of Work? Skill, Deskillling and the Labour Process*, (ed.) Wood, S., (London: Hutchinson, 1982).
- JOYCE, P., *Work, Society and Politics: The Culture of the Factory in Late Victorian England* (London: Methuen, 1982).
- LANE, T., *The Union Makes Us Strong* (London: Arrow Books, 1974).

- LAZONICK, W., "Industrial Relations and Technical Change: The Case of the Self-Acting Mule", *Cambridge Journal of Economics* 3 (1979).
- LEARNED, E.P., AQUILAR, F.J. and VALTZ, R.C.K., *European Problems in General Management* (Homewood, Ill.: Richard D. Irwin Inc. for INEDE Management Development Institute, 1963).
- LEE, G. and WRENCH, J., *In Search of a Skill* (London: Commission for Racial Equality, 1983).
- LESZCZYŃSKI, R., "An Investigation into Industrial Democracy in Brewster & Bennett Ltd.", unpublished thesis submitted for Diploma in Industrial Relations, Lanchester Polytechnic, June 1981.
- LITTLEFIELD, T. and RATHMILL, K., "The Financial Justification of NC Turning Machines", *Production Engineer* (April 1978).
- LITTLER, C.R., *The Development of the Labour Process in Capitalist Societies* (London: Heinemann Educational Books, 1983).
- London Graduate School of Business, "William Attlee Ltd.", Case Study BP21 A (Revised), mimeo, undated.
- LUPTON, T., "On the Shop Floor: Output and Earnings" in *Payment Systems*, (ed.) Lupton, T. (Harmondsworth: Penguin Books, 1972).
- Machine Tools Economic Development Council, *A Financial Study of British Machine Tool Companies*, a report by Peat, Marwick, Mitchell & Co., published by the National Economic Development Office, London, January 1974.
- Machine Tools Economic Development Council, "Industrial Strategy:

- Report by the Machine Tools EDC", mimeo, National Economic Development Office, March 1978.
- Machine Tools Economic Development Council, "Machine Tools: Industrial Strategy", leaflet, National Economic Development Office, March 1978.
- MELMAN, S., "The Machinery Makers", *Listener* 62 (26 November 1959)
- MELMAN, S., "Preliminary Consideration of the Possibility of Making Economic and Technical Surveys of the Machine Tool Industries in Member Countries", EPA Project No. 420, a paper presented to the Director of the European Productivity Agency, 23 October 1959.
- Ministry of Technology, "Report of the Working Party on the Problems Arising from the Cyclical Pattern of Machine Tool Orders", chaired by Bullock, R.H.W., London, HMSO, 1966.
- Ministry of Technology, "Pre-production Order Scheme (parts I and II)", prepared by MA2, Abell House, London, March 1969.
- NICHOLS, T. and Beynon, H., *Living with Capitalism: Class Relations and the Modern Factory* (London: Routledge & Kegan Paul, 1977).
- NIGHTINGALE, M., "UK Productivity Dealing in the 1960s" in *Capital and Labour* (ed.) Nicols, T. (London: Fontana, 1980).
- NOBLE, D.F., "Before the Fact: Social Choice in Machine Design", paper delivered at the National Convention of the Organisation of American Historians, April 1978. Later published in *Case Studies in the Labor Process* (ed.) Zimbalist, A. (New York, Monthly Review Press, 1977).

- PAULDEN, S. and HAWKINS, W., *Whatever Happened at Fairfields?*
(London: Gower, 1969).
- POLLARD, S., *The Genesis of Modern Management: A Study of the
Industrial Revolution in Great Britain* (Harmondsworth:
Penguin Books, 1968).
- POLLERT, A., *Girls, Wives and Factory Lives* (London: Macmillan,
1981).
- RAMSAY, H., "Participation : The Pattern and its Significance",
in *Capital and Labour*, (ed.) Nicols, T. (Glasgow: Fontana,
1980).
- ROBERTS, K., *The Working Class* (London: Longmans, 1978).
- RICHARDSON, K., *Twentieth Century Coventry* (Coventry: City of
Coventry, 1972).
- RIMMER, M., *Race and Industrial Conflict* (London: Heinemann
Educational Books, 1972).
- SAUL, S.B., "The American Impact upon British Industry", *Business
History*, vol. 3 no. 1 (1960).
- SAUL, S.B., "The Machine Tool Industry in Britain to 1914",
Business History, vol. 10 no. 1 (1968).
- SAUL, S.B., "The Market and the Development of the Mechanical
Engineering Industries in Britain, 1860-1914" in (ed.)
Supple, B., *Essays in Business History* (Oxford: Clarendon
Press, 1977).
- SCHLOSS, D., *Methods of Industrial Remuneration* (London: Williams
and Norgate, 1892).
- SHAIKEN, H., "Impact of New Technologies on Employees and Their
Organisations" (preprint, International Institute for

- Comparative Social Research, 1979).
- SCHRANK, R., *Ten Thousand Working Days* (Cambridge, Mass.: MIT Press, 1979).
- TERRY, M., "Shop Steward Development and Managerial Strategies" in (ed.) Bain, G., *Industrial Relations in Britain* (Oxford: Blackwell, 1983).
- TERRY, M., "The Emergence of a Lay Elite? Some Recent Changes in Shop Stewards' Organisation", Discussion Paper No. 14, November 1974, Industrial Relations Research Unit, University of Warwick.
- THOMPSON, P. and BANNON, E., *Working the System: The Shop Floor and New Technology* (London: Pluto Press, 1985).
- THOMS, D.W., and DONNELLY, T., "Coventry's Industrial Economy, 1880-1980", in *Life and Labour in a Twentieth Century City*, (eds.) Lancaster and Mason.
- TOLLIDAY, S., "Government, Employers and Shopfloor Organisation in the British Motor Industry, 1939-69", Kings College Research Centre, mimeo, September 1982. Later published in *Shopfloor Bargaining and the State: Historical and Comparative Perspectives*, (eds.) Tolliday, S. and Zeitlin, J. (Cambridge: C.U.P., 1985).
- TOLLIDAY, S., "High Tide and After: Coventry's Engineering Workers and Shopfloor Bargaining, 1945-60", in *Life and Labour in a Twentieth Century City: The Experience of Coventry*, (eds.) Lancaster and Mason.
- Trade Union Studies Information Unit, *Machine Tool Report* (Newcastle: TUSIU, 1978).

- West Midlands County Council, Economic Development Unity, "The Machine Tool Industry in the West Midlands: A Preliminary Study", December 1983.
- WILKINSON, B., "Technical Change and Work Organisation", 2 vols. (Ph.D. thesis, University of Aston, November 1981). Later published under the title, *Shopfloor Politics of New Technology* (London: Heinemann, 1983).
- WILLIAMS, R., "Payments-By-Results, Case Study No. 6", a report commissioned by the National Board for Prices and Incomes, January 1969.
- WILLIAMSON, G., *Wheels Within Wheels: The Story of the Starleys of Coventry* (London: Bles, 1966).
- YATES, M.L., *Wages and Labour Conditions in British Industry* (London: MacDonald and Evans, 1937).
- ZEITLIN, J., "The Emergence of Shop Stewards' Organisation and Job Control in the British Car Industry: Review Essay", *History Workshop Journal* 10 (1980).
- ZEITLIN, J., "The Labour Strategies of British Engineering Employers, 1890-1922", King's Research Centre, undated mimeo. Later published in *Managerial Strategies and Industrial Relations: An Historical and Comparative Perspective*, (eds.) Gospel, H.S., and Littler, C.R. (London: Heinemann, 1983).

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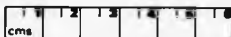
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